

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

REMINDERS

- ◆ Product information in this catalog is subject to change without notice, and is for reference only. Therefore, please contact GOTREND Technology to check for the latest information before practical application or usage of the products.
- ◆ This catalog contains only typical specifications, please contact GOTREND Technology for further details if you can not find special components or information you need in this catalogue. Please also approve our product specifications or transact the approval sheet for product specifications before ordering.
- ◆ This catalogue only applies to products purchased through GOTREND Technolgy or its official agencies. This catalogue does not apply to products that are purchased through other third parties.
- ◆ Please read Attention and CAUTION note (for storage, operating, rating, soldering, mounting and handling) in this catalog to ensure product proper usage.
- ◆ GOTREND Technology is not responsible for issues that occur related to the intellectual property rights or other rights of our company or a third party when you use a product listed in this catalog. GOTREND Technology do not grant license of these rights.
- ◆ Information and data provided in the brochure can and do vary in different applications, and actual performance may vary over time.
- ◆ "Delivery Specification" illustrating precautions for the specifications and safety of each product listed in this catalog is available and we strongly recommend to provide these delivery specifications with customers that use these products.
- ◆ For exporting of product in this catalog, please take note it may be a restricted item according to the "Foreign Exchange and Foreign Trade Control Law". In such cases, it is necessary to acquire export permission in accordance to this law.
- ◆ Any reproduction or extraction of the contents in this catalog is prohibited without prior permission from GOTREND Technology.
- ◆ Products listed in this catalog are intended for general electronic device usage under normal operation and use condition including telecommunication equipment, home appliances, sports equipment AV equipment, industrial machine, office equipment etc. Please take note that our products are not designed, intended or authorized for use in below mentioned applications unless explicitly agreed in writing between the parties to avoid product failure that could result in situation where personal injury or death could occur.

- (1) Aerospace/Aviation equipment
- (2) Atomic energy-related equipment
- (3) Disaster prevention/crime prevention equipment
- (4) Electric heating apparatus, burning equipment
- (5) Medical equipment
- (6) Military equipment
- (7) Power-generation control equipment
- (8) Public information-processing equipment
- (9) Safety equipment
- (10) Seabed equipment
- (11) Transportation control equipment
- (12) Transportation equipment (cars, electric trains, ships, etc.)
- (13) Other applications that are not considered general-purpose applications

- ◆ Our manufacturing sites fully compliance with requirement regarding the quality management system in the automotive industry under the IATF 16949 standard. GOTREND Technology respect individual agreements with reference to customer requirements and customer specific requirements (CSR). We will like to emphasize that only requirements mutually agreed upon will in implemented in our Quality Management System taking into consideration that IATF 16949 may appear to support the acceptance of unilateral requirements. We will only legally bind to this individually agreed upon agreement under the IATF 16949 standard.

- ◆ The product itself is a powder metallurgy product, so the structure is relatively fragile, and it should not be used for products that are easy to fall. In addition, when this product is assembled, it should avoid collision with the tool or mechanism shell.



- ◆ It is not recommended to use hot air gun for disassembling of this product. When using of hot air gun to repair other parts, please also take note that long time or high temperature exposure of this product will also damage the inductance device. If you need to use the hot air gun to disassemble the product, it is recommended to adjust the hot air gun temperature to 380 deg.C±5 deg.C. The blower head of the hot air gun should be perpendicular and at least 1cm away from the product. After heating the product to the tin material melting point, use tweezers to remove the product from the PCB.



Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

Features & Application :

- 1.Power supply PWM circuit input / output inductor
- 2.Power line noise suppression
- 3.DC-DC Converter
- 4.To help you go pass CE/FCC standard
- 5.TFT/ WiFi/ MobilePhone/ MP3/ PDA....etc. Application
- 6.Low Profile for all compact design



(Picture for reference only)

Part No. Example :

PN	:	GNRT	2012	P	[]	-	1R0	[]
-----		-----	-----	---	---		-----	---
ID	:	1	2	3	4		5	6
1	:	GOTREND Series Code						
2	:	Dimension Code : 2012 = (L) 2.0 x (W) 2.0 x (H) 1.2 mm						
3	:	RoHS Compliance						
4	:	[A][B][H] : Special Material Code						
5	:	Inductance : 1R0 = 1.0uH Ex : 100 = 10uH						
6	:	Tolerance : M = 20% , N = 30%						


Basic Information :

Made in	China
Pin Foot	SMD
Shielding	Yes
J-STD-020	MSL Level 1
RoHS	Compliant
REACH	Compliant
Halogen	Free

Operating & Storage Condition :

- * Operating Temp -40 ~ +125 deg.C (Including self - temperature rise)
- * Storage Temp 1. -10 ~ +45 deg.C , 50 ~ 60% RH (Product with taping)
2. -40 ~ +125 deg.C (On board)
- * Storage Life Time 6 Month (Less than 40 deg.C and 60% RH)

Attention & Caution :

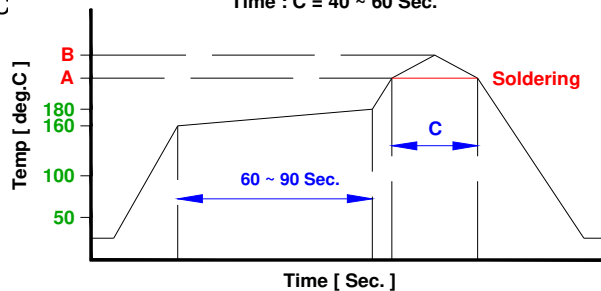
- * Keep out of Splashing water or salt water
- * Avoid Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
-  Vibrations or shocks which exceed the specified condition
- Dew condense
- Layout near the edge of PCB
- Over flexure after SMT mounting & PCBA
- * Pin foot or SMD pad solderability: Pb free type is best within 6 months after delivery
- * Humidity sensitive , IPC/JEDEC J-STD-020 MSL if over Level 1, recommend bake 30mins@150 degree before PCBA
- * Caution for human life relative applications : PLS contact & consult with GOTREND team in design stage.

Test Condition :

- * Equipment HP4284A , HP42841A - L , Q , DCR , IDC
HP8753D Network analyzer - SRF
- * Standard Atmosphere Conditions:
Ambient Temperature 20 ± 15 deg.C
Humidity RH 65 ± 20%
- * If there may be any doubt on the test result ,
Measurement shall be made within the following limits:
Ambient Temperature 25 ± 5 deg.C
Humidity RH 75 ± 10%

Recommend IR Reflow Curve : GTX-IR-FILE001

Lead Free Solder : A = 217 deg.C , B = 245+/-5 deg.C
Time : C = 40 ~ 60 Sec.

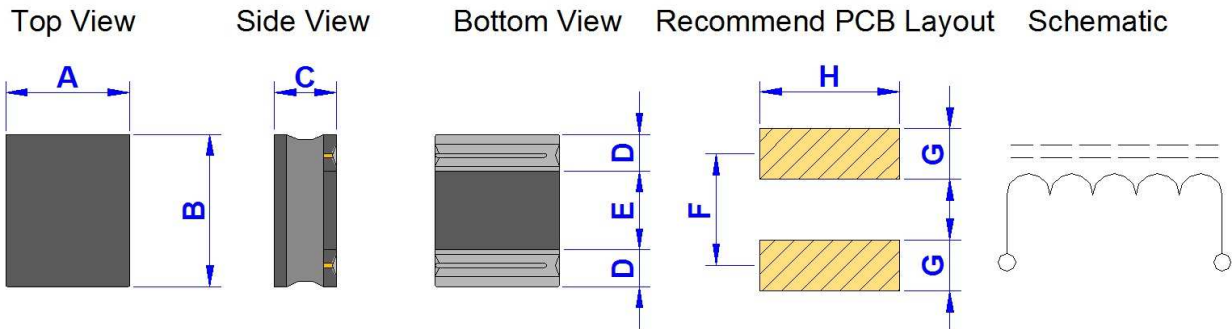


Notice : Iron Soldering , Solder < 30 Watt ,
Direct touch the terminal x 3 Sec. Max. @ 350 deg.C

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT201610P-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
201610	1.60 +0.3/-0.1	2.00 +0.3/-0.1	1.02	0.60 Ref.	0.80 Ref.	1.60	0.80	1.80

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT201610P-R24□	0.24	M	35.0	45.0	4400	3300
GNRT201610P-R47□	0.47	M	50.0	65.0	2800	2900
GNRT201610P-R56□	0.56	M	50.0	65.0	2800	2900
GNRT201610P-R68□	0.68	M	55.0	65.0	2600	2800
GNRT201610P-1R0□	1.00	M	90.0	108.0	2500	2300
GNRT201610P-2R2□	2.20	M	150.0	180.0	1450	1600

■ Inductance test Freq. : 1MHz / 0.1V

■ L-Tolerance : M = 20%

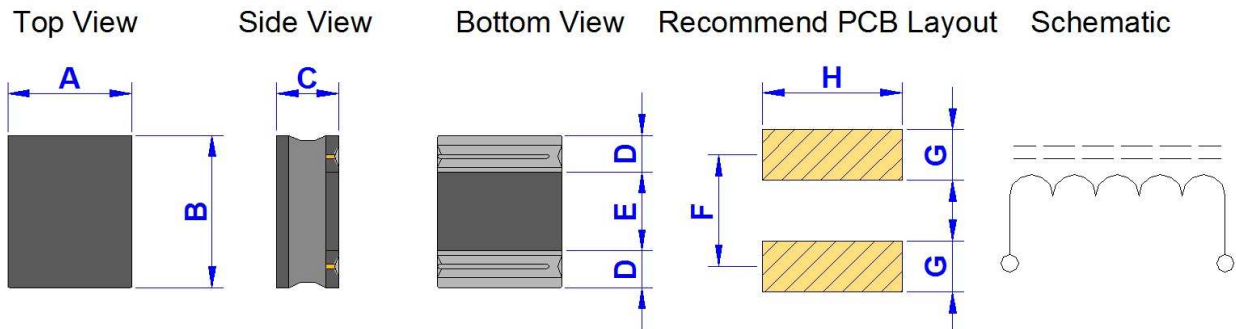
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Irms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT201610PH-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
201610PH	1.60 +0.2/-0.1	2.00 +0.2/-0.1	1.00	0.50 Ref.	1.00 Ref.	1.60	0.75	1.90

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT201610PH-R10□	0.10	M	13.0	18.0	7000	5500
GNRT201610PH-R24□	0.24	M	26.0	32.0	5900	4200
GNRT201610PH-R33□	0.33	M	32.0	38.0	5000	3700
GNRT201610PH-R47□	0.47	M	40.0	48.0	4300	3300
GNRT201610PH-R68□	0.68	M	55.0	65.0	3600	2900
GNRT201610PH-1R0□	1.00	M	70.0	85.0	2700	2450
GNRT201610PH-1R5□	1.50	M	100.0	120.0	2200	2200
GNRT201610PH-2R2□	2.20	M	135.0	165.0	1900	1850

■ Inductance test Freq. : 1MHz / 0.1V

■ L-Tolerance : M = 20%

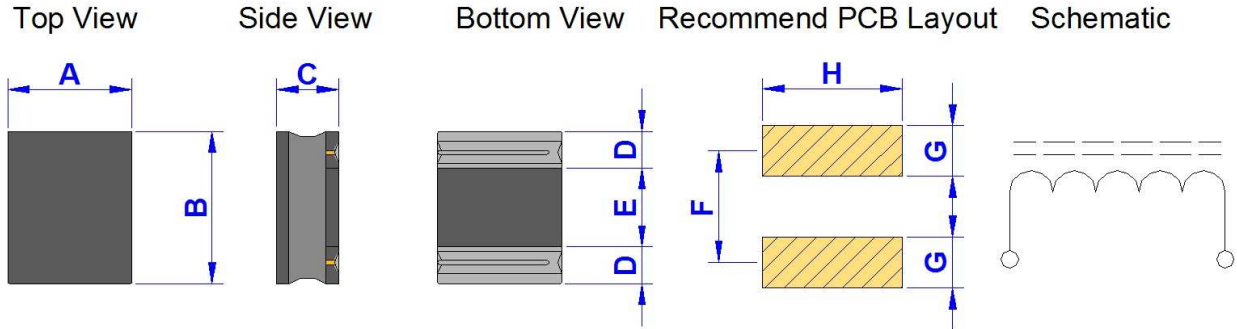
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Irms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT201612P-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
201612	1.60 +0.3/-0.1	2.00 +0.3/-0.1	1.20	0.60 Ref.	0.80 Ref.	1.60	0.80	1.80

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT201612P-R24□	0.24	M	25.00	33.00	4800	4000
GNRT201612P-R47□	0.47	M	35.00	46.00	3500	3300
GNRT201612P-1R0□	1.00	M	80.00	104.00	2500	2700
GNRT201612P-1R5□	1.50	M	90.00	108.00	2000	2100
GNRT201612P-2R2□	2.20	M	155.00	186.00	1600	1500

■ Inductance test Freq. : 1MHz / 0.1V

■ L-Tolerance : M = 20%

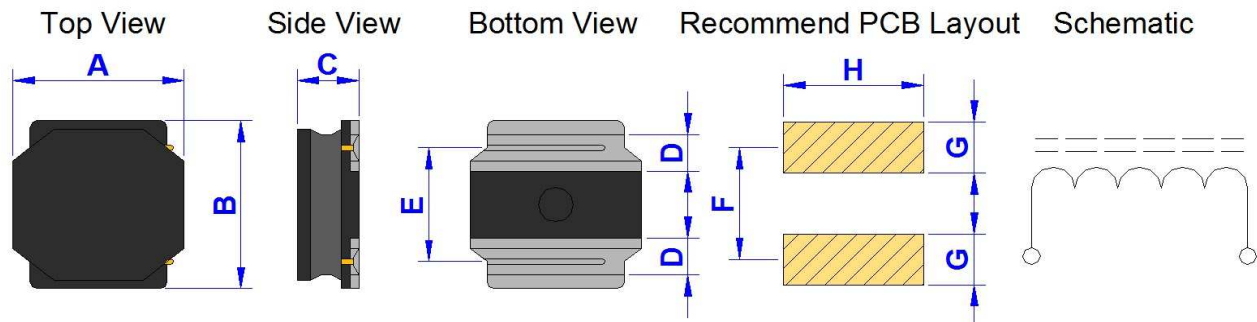
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Irms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT2012PB-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
2012PB	2.00 +/-0.1	2.00 +/-0.1	1.20	0.50	1.25	1.35	0.65	2.00

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT2012PB-1R0□	1.00	N	70.0	84.0	1900	1700
GNRT2012PB-1R5□	1.50	N	90.0	108.0	1650	1500
GNRT2012PB-2R2□	2.20	M	107.0	128.4	1350	1370
GNRT2012PB-3R3□	3.30	M	190.0	228.0	1000	1020
GNRT2012PB-4R7□	4.70	M	241.0	289.2	900	910

■ Inductance test Freq. : 100KHz / 1.0V

■ L-Tolerance : N = 30% , M = 20%

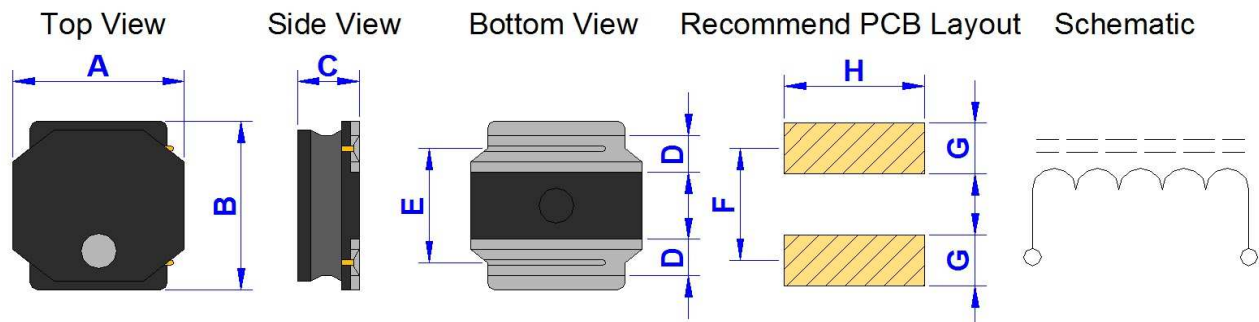
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Irms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT2410PA-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
2410PA	2.40 +/-0.1	2.40 +/-0.1	1.00	0.60	1.45	1.45	0.70	2.00

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT2410PA-R68□	0.68	N	60.0	72.0	2200	1570
GNRT2410PA-1R0□	1.00	N	70.0	84.0	1800	1410
GNRT2410PA-1R5□	1.50	M	110.0	132.0	1550	1160
GNRT2410PA-2R2□	2.20	M	150.0	180.0	1290	970
GNRT2410PA-3R3□	3.30	M	220.0	264.0	1000	770
GNRT2410PA-4R7□	4.70	M	290.0	348.0	880	670
GNRT2410PA-6R8□	6.80	M	410.0	492.0	750	570
GNRT2410PA-100□	10.00	M	690.0	828.0	550	450
GNRT2410PA-150□	15.00	M	1020.0	1224.0	470	370
GNRT2410PA-220□	22.00	M	1470.0	1764.0	390	300

■ Inductance test Freq. : 100KHz / 1.0V

■ L-Tolerance : N = 30% , M = 20%

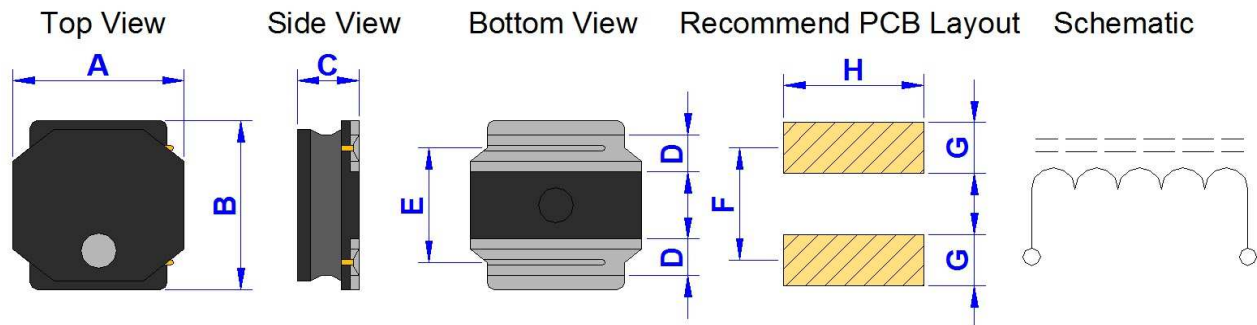
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Irms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT2412PA-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
2412PA	2.40 +/-0.1	2.40 +/-0.1	1.20	0.60	1.45	1.45	0.70	2.00

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT2412PA-1R0□	1.00	N	77.0	92.4	2350	1300
GNRT2412PA-1R5□	1.50	N	100.0	120.0	2100	1150
GNRT2412PA-2R2□	2.20	M	140.0	168.0	1700	1000
GNRT2412PA-3R3□	3.30	M	225.0	270.0	1400	750
GNRT2412PA-4R7□	4.70	M	300.0	360.0	1150	650
GNRT2412PA-6R8□	6.80	M	420.0	504.0	950	550
GNRT2412PA-100□	10.00	M	600.0	720.0	810	450

■ Inductance test Freq. : 100KHz / 1.0V

■ L-Tolerance : N = 30% , M = 20%

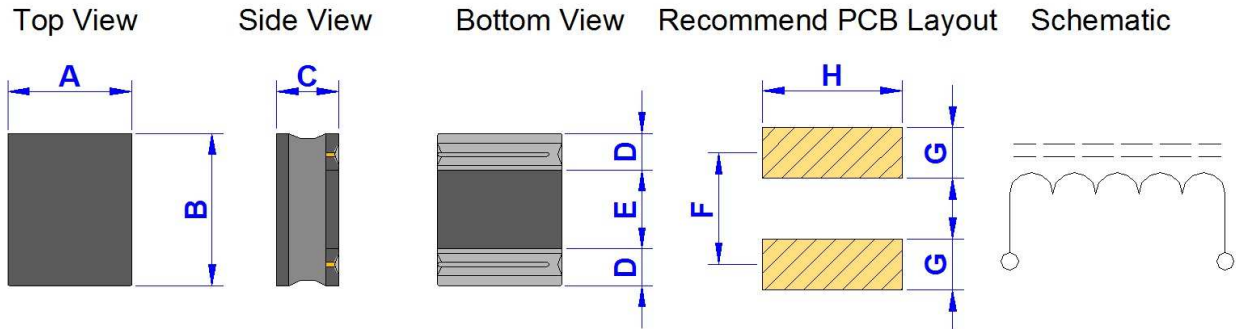
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Irms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT252010P-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
252010	2.00 +/-0.2	2.50 +/-0.2	1.00	0.85 Ref.	0.80 Ref.	1.75	0.95	2.20

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT252010P-1R0□	1.00	N	70.0	84.0	1750	2200
GNRT252010P-1R5□	1.50	N	107.0	128.0	1500	1800
GNRT252010P-2R2□	2.20	M	158.0	190.0	1300	1650
GNRT252010P-3R3□	3.30	M	229.0	275.0	1000	1250
GNRT252010P-4R7□	4.70	M	332.0	398.0	850	1000
GNRT252010P-6R8□	6.80	M	443.0	532.0	750	850
GNRT252010P-100□	10.00	M	712.0	854.0	600	750

■ Inductance test Freq. : 1MHz / 0.1V

■ L-Tolerance : N = 30% , M = 20%

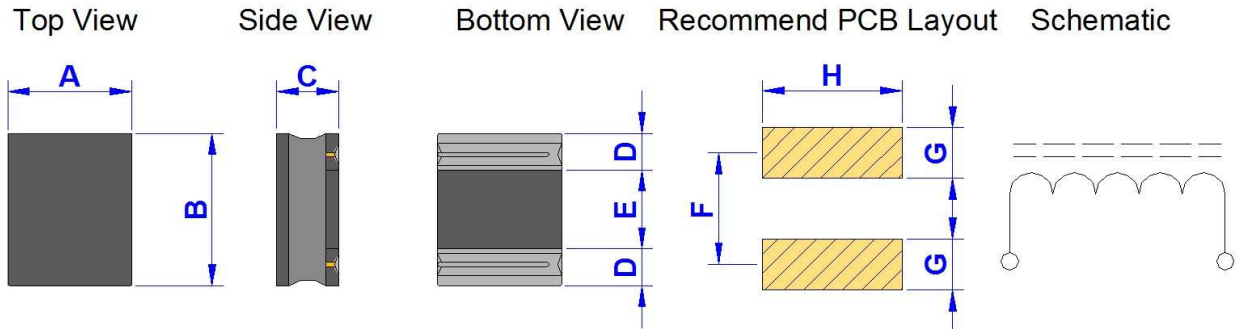
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Irms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT252010PB-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
252010PB	2.00 +0.35/-0.05	2.50 +0.3/-0.1	1.02	0.85 Ref.	0.80 Ref.	1.85	1.05	2.40

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT252010PB-R47□	0.47	N	30.0	36.0	2570	2800
GNRT252010PB-R68□	0.68	N	39.0	46.8	2450	2450
GNRT252010PB-1R0□	1.00	N	55.0	66.0	2050	2200
GNRT252010PB-1R5□	1.50	N	90.0	108.0	1700	1700
GNRT252010PB-2R2□	2.20	M	114.0	136.8	1550	1550
GNRT252010PB-3R3□	3.30	M	170.0	204.0	1100	1250
GNRT252010PB-4R7□	4.70	M	250.0	300.0	950	1050
GNRT252010PB-6R8□	6.80	M	370.0	444.0	800	850
GNRT252010PB-100□	10.00	M	470.0	564.0	650	750
GNRT252010PB-150□	15.00	M	750.0	900.0	450	550
GNRT252010PB-220□	22.00	M	1120.0	1344.0	400	500

■ Inductance test Freq. : 1MHz / 0.1V

■ L-Tolerance : N = 30% , M = 20%

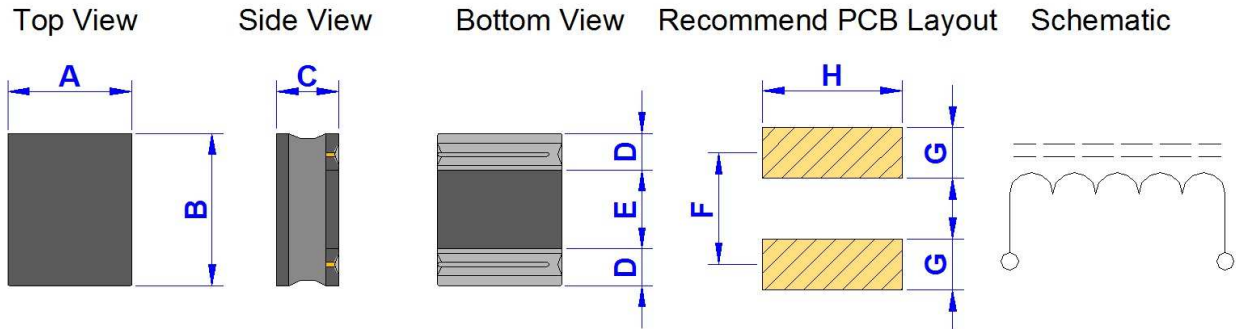
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Irms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT252010PH-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
252010PH	2.00 +0.2/-0.1	2.50 +0.2/-0.1	1.00	0.75 Ref.	1.00 Ref.	1.95	1.00	2.40

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT252010PH-R24□	0.24	M	24.0	32.0	6700	4700
GNRT252010PH-R33□	0.33	M	25.0	33.0	5150	4500
GNRT252010PH-R47□	0.47	M	30.0	38.0	4900	3800
GNRT252010PH-R68□	0.68	M	42.0	52.0	3600	3400
GNRT252010PH-1R0□	1.00	M	50.0	62.0	3000	3100
GNRT252010PH-1R5□	1.50	M	80.0	96.0	2700	2400
GNRT252010PH-2R2□	2.20	M	110.0	132.0	2100	2100

■ Inductance test Freq. : 1MHz / 1V

■ L-Tolerance : M = 20%

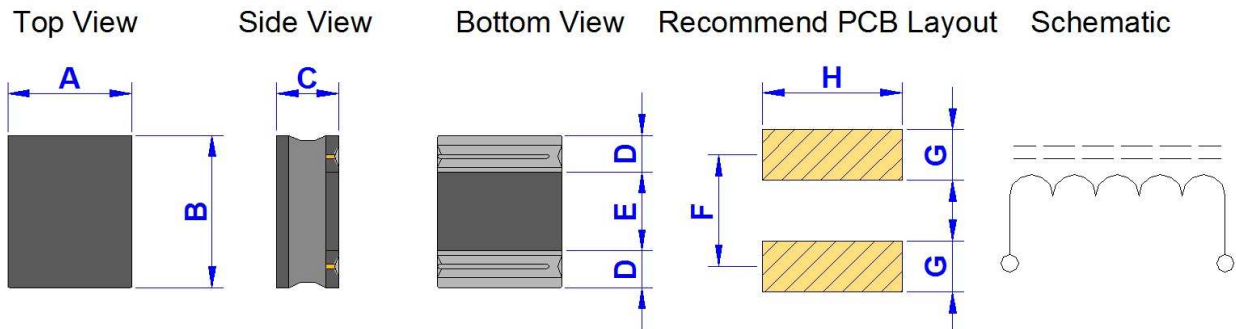
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Irms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT252012P-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
252012	2.00 +/-0.2	2.50 +0.2	1.20	0.85 Ref.	0.80 Ref.	1.75	0.95	2.20

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT252012P-1R0□	1.00	N	73.0	88.0	2240	2200
GNRT252012P-1R5□	1.50	N	100.0	120.0	1760	1860
GNRT252012P-2R2□	2.20	M	129.0	155.0	1440	1700
GNRT252012P-3R3□	3.30	M	220.0	264.0	1040	1200
GNRT252012P-4R7□	4.70	M	290.0	348.0	880	1040
GNRT252012P-6R8□	6.80	M	370.0	444.0	750	940
GNRT252012P-100□	10.00	M	570.0	684.0	650	840
GNRT252012P-150□	15.00	M	835.0	1002.0	600	500
GNRT252012P-220□	22.00	M	1200.0	1440.0	550	450

■ Inductance test Freq. : 1MHz / 0.1V

■ L-Tolerance : N = 30% , M = 20%

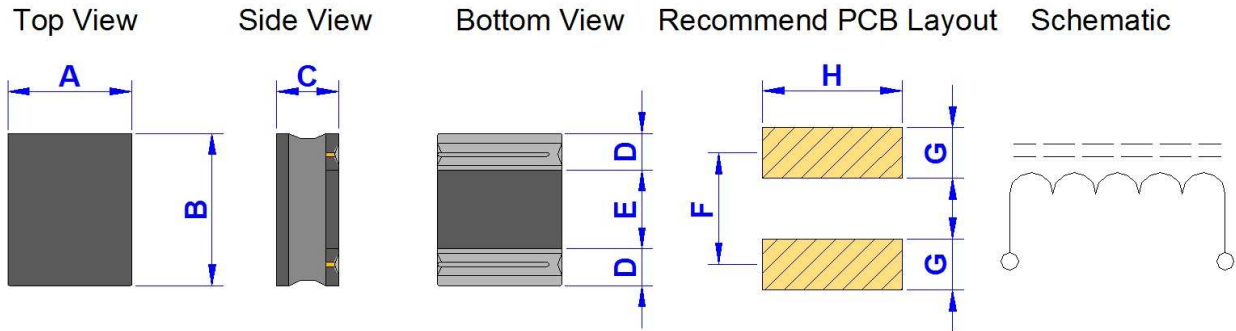
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Iirms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT252012PH-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
252012PH	2.00 +0.35/-0.05	2.50 +0.3/-0.1	1.20	0.85 Ref.	0.80 Ref.	1.85	1.05	2.40

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT252012PH-R24□	0.24	M	21.0	27.0	6500	4700
GNRT252012PH-R47□	0.47	M	29.0	39.0	3800	3900
GNRT252012PH-R68□	0.68	M	42.0	55.0	3700	3500
GNRT252012PH-1R0□	1.00	M	47.0	62.0	3000	3000
GNRT252012PH-2R2□	2.20	M	98.0	117.0	2000	2200

■ Inductance test Freq. : 1MHz / 0.1V

■ L-Tolerance : N = 30% , M = 20%

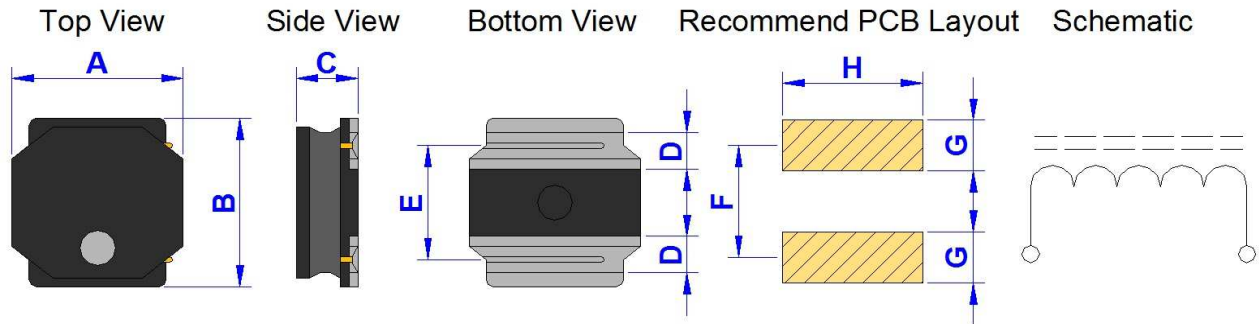
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (I_{rms}) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT3010PA-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
3010PA	3.00 +/-0.1	3.00 +/-0.1	1.00	0.90	1.90	2.20	0.80	2.70

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT3010PA-1R2□	1.20	N	65.0	78.0	1700	1480
GNRT3010PA-1R5□	1.50	N	75.0	90.0	1440	1370
GNRT3010PA-2R2□	2.20	M	83.0	99.6	1300	1300
GNRT3010PA-3R3□	3.30	M	130.0	156.0	1000	1030
GNRT3010PA-4R7□	4.70	M	170.0	204.0	850	900
GNRT3010PA-6R8□	6.80	M	250.0	300.0	700	745
GNRT3010PA-100□	10.00	M	350.0	420.0	600	620
GNRT3010PA-150□	15.00	M	550.0	660.0	450	480
GNRT3010PA-220□	22.00	M	770.0	924.0	380	410

■ Inductance test Freq. : 100KHz / 1.0V

■ L-Tolerance : N = 30% , M = 20%

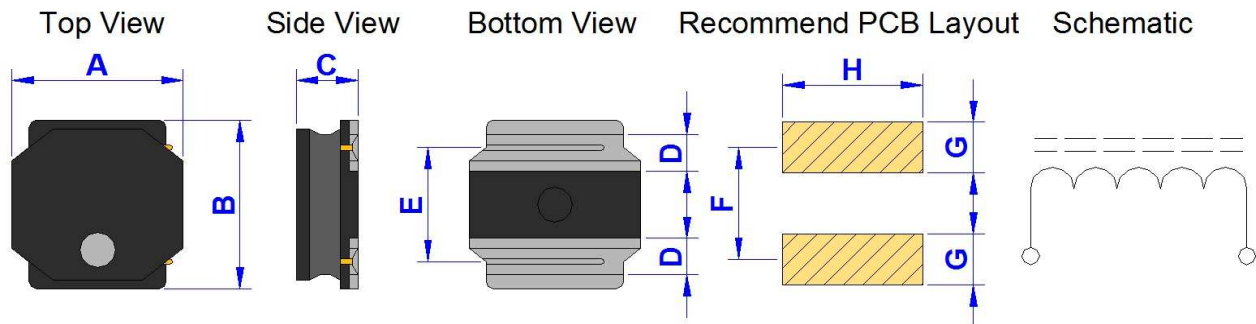
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Irms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT3012PA-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
3012PA	3.00 +/-0.1	3.00 +/-0.1	1.20	0.90	1.90	2.20	0.80	2.70

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT3012PA-1R0□	1.00	N	48.0	57.6	2200	1710
GNRT3012PA-1R5□	1.50	N	55.0	66.0	1700	1600
GNRT3012PA-2R2□	2.20	M	75.0	90.0	1500	1370
GNRT3012PA-3R3□	3.30	M	100.0	120.0	1200	1210
GNRT3012PA-4R7□	4.70	M	130.0	156.0	1000	1060
GNRT3012PA-6R8□	6.80	M	190.0	228.0	850	890
GNRT3012PA-100□	10.00	M	270.0	324.0	730	720
GNRT3012PA-150□	15.00	M	450.0	540.0	530	570
GNRT3012PA-220□	22.00	M	630.0	756.0	500	500

■ Inductance test Freq. : 100KHz / 1.0V

■ L-Tolerance : N = 30% , M = 20%

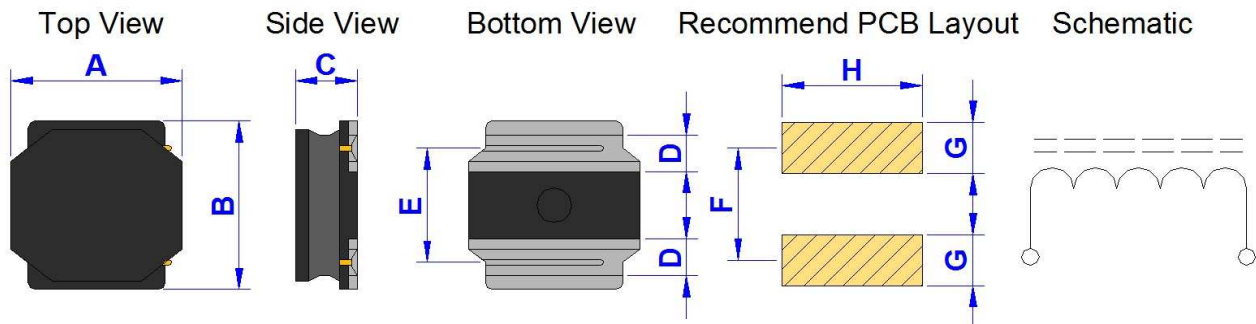
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Irms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT3015P-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
3015	3.00 +/-0.1	3.00 +/-0.1	1.50	0.90	1.90	2.20	0.80	2.70

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT3015P-1R0□	1.00	N	30.0	36.0	2100	2100
GNRT3015P-1R5□	1.50	N	40.0	48.0	1800	1820
GNRT3015P-2R2□	2.20	M	60.0	72.0	1480	1500
GNRT3015P-3R3□	3.30	M	80.0	96.0	1210	1230
GNRT3015P-4R7□	4.70	M	120.0	144.0	1020	1040
GNRT3015P-6R8□	6.80	M	160.0	192.0	870	880
GNRT3015P-100□	10.00	M	230.0	276.0	700	710
GNRT3015P-150□	15.00	M	360.0	432.0	560	560
GNRT3015P-220□	22.00	M	520.0	624.0	470	470

■ Inductance test Freq. : 100KHz / 1.0V

■ L-Tolerance : N = 30% , M = 20%

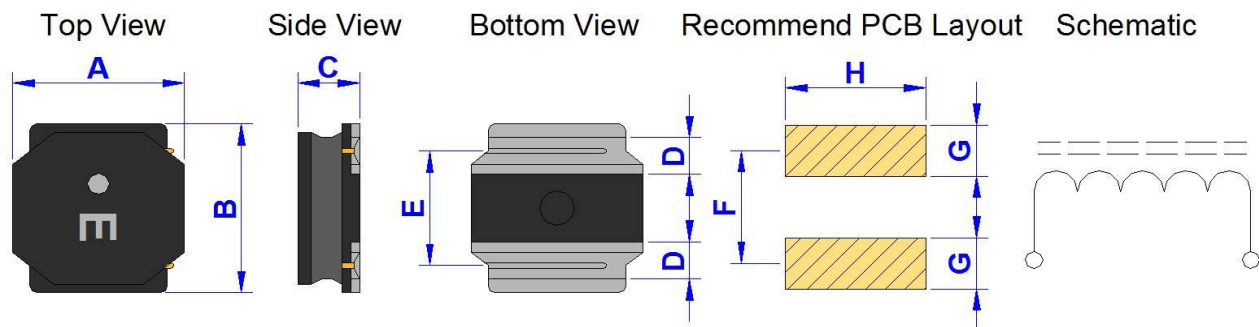
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Iirms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT4010PB-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
4010PB	4.00 +/-0.2	4.00 +/-0.2	1.00	1.10	2.50	2.80	1.20	3.70

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.	Inductance Symbol
GNRT4010PB-1R0□	1.00	N	56.0	67.2	2000	1900	A
GNRT4010PB-2R2□	2.20	M	85.0	102.0	1200	1500	C
GNRT4010PB-3R3□	3.30	M	100.0	120.0	1100	1400	E
GNRT4010PB-4R7□	4.70	M	140.0	168.0	950	1200	H
GNRT4010PB-6R8□	6.80	M	200.0	240.0	800	1000	I
GNRT4010PB-100□	10.00	M	300.0	360.0	620	750	K
GNRT4010PB-150□	15.00	M	430.0	516.0	540	600	M
GNRT4010PB-220□	22.00	M	570.0	684.0	450	500	N

■ Inductance test Freq. : 100KHz / 1.0V

■ L-Tolerance : N = 30% , M = 20%

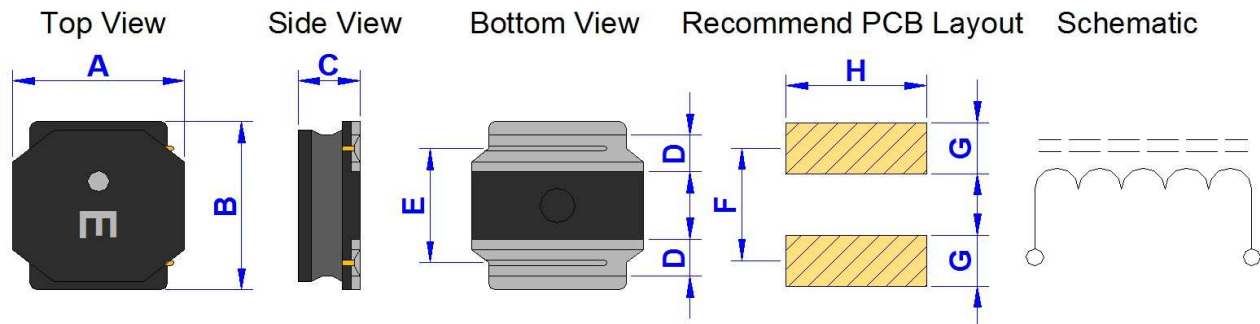
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Iirms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT4012PB-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
4012PB	4.00 +/-0.2	4.00 +/-0.2	1.20	1.10	2.50	2.80	1.20	3.70

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.	Inductance Symbol
GNRT4012PB-1R0□	1.00	N	42.0	50.4	2800	2200	A
GNRT4012PB-2R2□	2.20	M	60.0	72.0	1650	1900	C
GNRT4012PB-3R3□	3.30	M	70.0	84.0	1400	1700	E
GNRT4012PB-4R7□	4.70	M	95.0	114.0	1200	1500	H
GNRT4012PB-6R8□	6.80	M	125.0	150.0	900	1300	I
GNRT4012PB-100□	10.00	M	170.0	204.0	800	1100	K
GNRT4012PB-150□	15.00	M	260.0	312.0	650	750	M
GNRT4012PB-220□	22.00	M	400.0	480.0	500	620	N

■ Inductance test Freq. : 100KHz / 1.0V

■ L-Tolerance : N = 30% , M = 20%

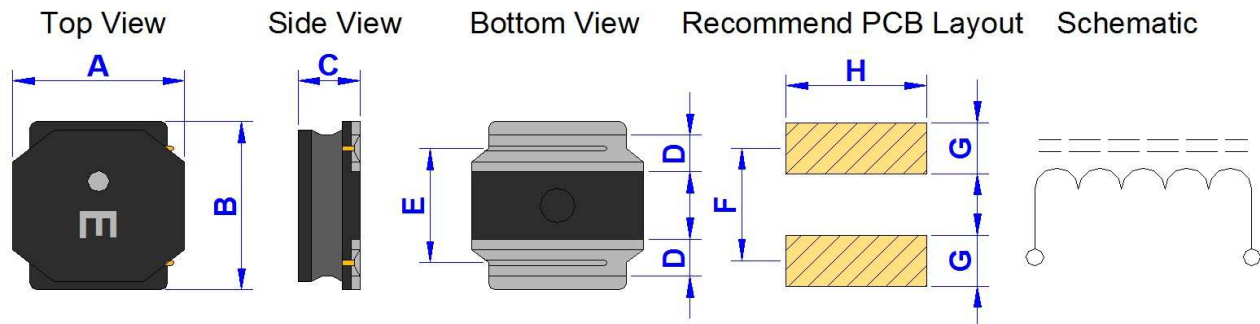
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Iirms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT4018PB-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
4018PB	4.00 +/-0.2	4.00 +/-0.2	1.80	1.10	2.50	2.80	1.20	3.70

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.	Inductance Symbol
GNRT4018PB-1R0□	1.00	N	27.0	32.4	4000	3200	A
GNRT4018PB-2R2□	2.20	M	42.0	50.4	3000	2200	C
GNRT4018PB-3R3□	3.30	M	55.0	66.0	2300	2000	E
GNRT4018PB-4R7□	4.70	M	70.0	84.0	2000	1700	H
GNRT4018PB-6R8□	6.80	M	98.0	117.6	1600	1450	I
GNRT4018PB-100□	10.00	M	150.0	180.0	1300	1200	K
GNRT4018PB-150□	15.00	M	210.0	252.0	1100	850	M
GNRT4018PB-220□	22.00	M	290.0	348.0	900	720	N
GNRT4018PB-330□	33.00	M	460.0	552.0	700	550	P

■ Inductance test Freq. : 100KHz / 1.0V

■ L-Tolerance : N = 30% , M = 20%

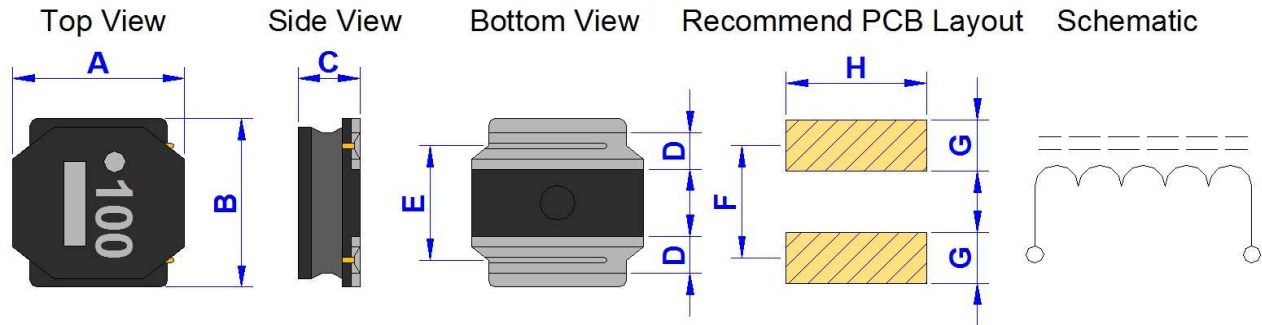
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (I_{rms}) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT5012PB-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
5012PB	4.90 +/-0.2	4.90 +/-0.2	1.20	1.20	3.30	3.60	1.50	4.00

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT5012PB-1R0□	1.00	N	53.0	63.6	4500	2300
GNRT5012PB-1R5□	1.50	N	70.0	84.0	3800	2200
GNRT5012PB-2R2□	2.20	M	85.0	102.0	3100	2000
GNRT5012PB-3R3□	3.30	M	160.0	192.0	2400	1450
GNRT5012PB-4R7□	4.70	M	180.0	216.0	2200	1400
GNRT5012PB-6R8□	6.80	M	260.0	312.0	1700	1100
GNRT5012PB-100□	10.00	M	420.0	504.0	1400	850
GNRT5012PB-150□	15.00	M	670.0	804.0	1200	640

■ Inductance test Freq. : 100KHz / 1.0V

■ L-Tolerance : N = 30% , M = 20%

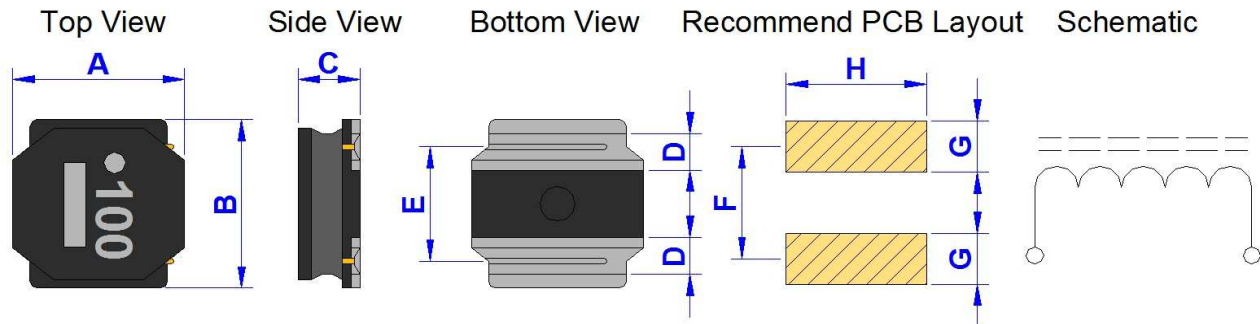
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Irms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT5020PB-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
5020PB	4.90 +/-0.2	4.90 +/-0.2	2.00	1.20	3.30	3.60	1.50	4.00

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT5020PB-1R0□	1.00	N	21.0	25.2	4000	3600
GNRT5020PB-1R5□	1.50	N	26.0	31.2	3350	3200
GNRT5020PB-2R2□	2.20	N	35.0	42.0	2900	2900
GNRT5020PB-3R3□	3.30	N	48.0	57.6	2400	2400
GNRT5020PB-4R7□	4.70	M	60.0	72.0	2000	2000
GNRT5020PB-6R8□	6.80	M	90.0	108.0	1600	1650
GNRT5020PB-100□	10.00	M	120.0	144.0	1300	1450
GNRT5020PB-150□	15.00	M	165.0	198.0	1100	1200
GNRT5020PB-220□	22.00	M	260.0	312.0	900	1000

■ Inductance test Freq. : 100KHz / 1.0V

■ L-Tolerance : N = 30% , M = 20%

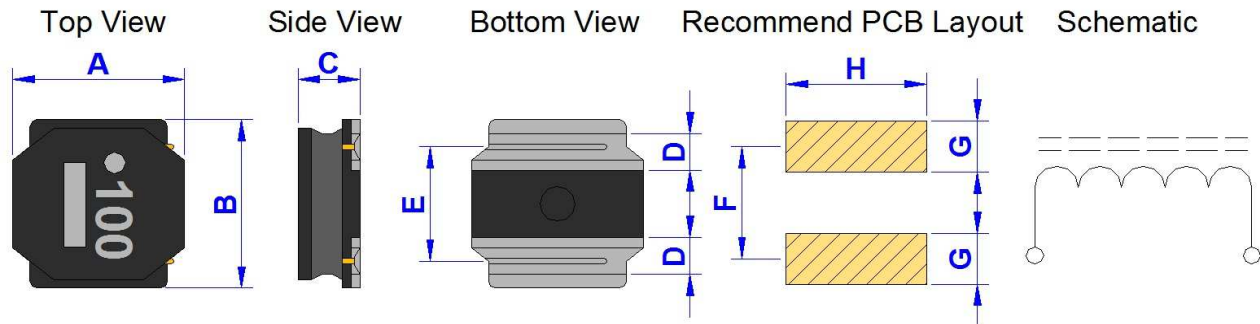
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Irms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT5040PB-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
5040PB	4.90 +/-0.2	4.90 +/-0.2	4.00	1.20	3.30	3.60	1.50	4.00

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT5040PB-1R5□	1.50	N	17.0	20.4	6400	4500
GNRT5040PB-2R2□	2.20	N	22.0	26.4	5000	3700
GNRT5040PB-3R3□	3.30	N	27.0	32.4	4000	3300
GNRT5040PB-4R7□	4.70	N	29.0	34.8	3300	3100
GNRT5040PB-6R8□	6.80	M	49.0	58.8	2800	2400
GNRT5040PB-100□	10.00	M	56.0	67.2	2300	2100
GNRT5040PB-150□	15.00	M	80.0	96.0	2000	1800
GNRT5040PB-220□	22.00	M	126.0	151.2	1500	1400

■ Inductance test Freq. : 100KHz / 1.0V

■ L-Tolerance : N = 30% , M = 20%

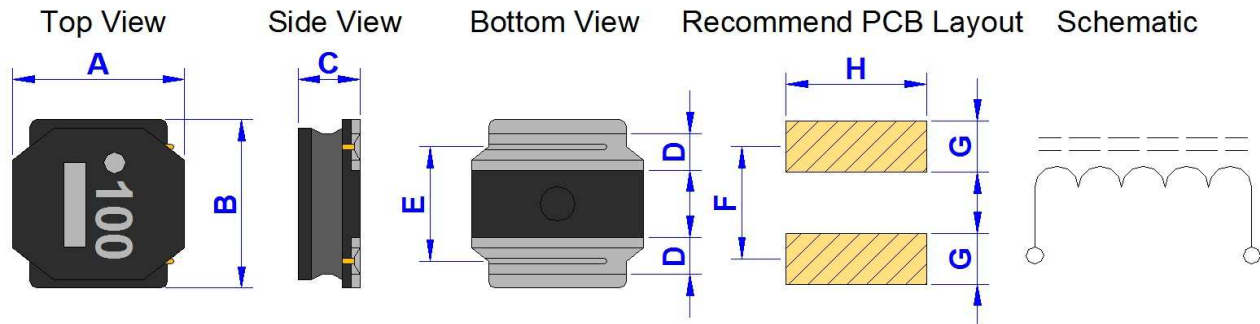
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Irms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT6010PB-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
6010PB	6.00 +/-0.2	6.00 +/-0.2	1.00	1.35	4.00	4.70	1.60	5.70

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT6010PB-1R5□	1.50	M	90.0	108.0	2400	1900
GNRT6010PB-2R2□	2.20	M	110.0	132.0	1900	1700
GNRT6010PB-3R3□	3.30	M	135.0	162.0	1600	1500
GNRT6010PB-4R7□	4.70	M	165.0	198.0	1300	1400
GNRT6010PB-6R8□	6.80	M	220.0	264.0	1200	1200
GNRT6010PB-100□	10.00	M	270.0	324.0	1000	1100
GNRT6010PB-220□	22.00	M	580.0	696.0	650	700

■ Inductance test Freq. : 100KHz / 1.0V

■ L-Tolerance : M = 20%

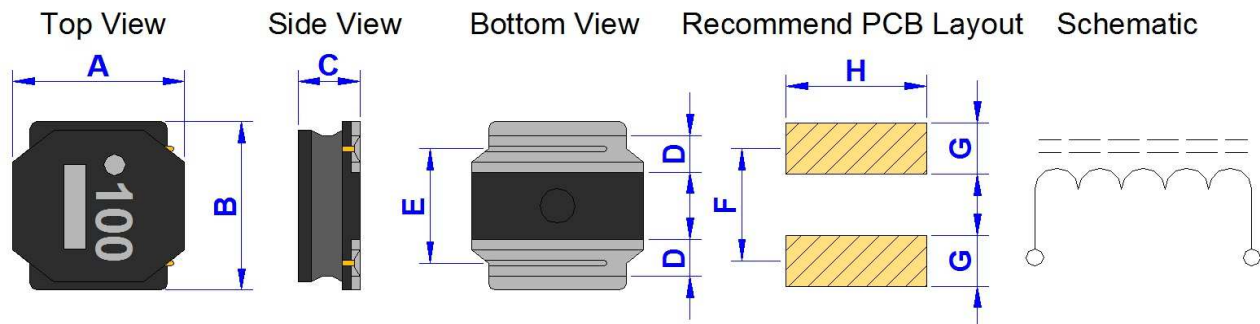
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Irms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT6012PB-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
6012PB	6.00 +/-0.2	6.00 +/-0.2	1.20	1.35	4.00	4.70	1.60	5.70

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT6012PB-2R5□	2.50	N	90.0	108.0	2100	1800
GNRT6012PB-3R3□	3.30	N	105.0	126.0	1800	1700
GNRT6012PB-4R7□	4.70	M	125.0	150.0	1600	1550
GNRT6012PB-5R3□	5.30	M	145.0	174.0	1500	1450
GNRT6012PB-6R8□	6.80	M	165.0	198.0	1300	1350
GNRT6012PB-100□	10.00	M	200.0	240.0	1000	1200
GNRT6012PB-150□	15.00	M	295.0	354.0	800	800
GNRT6012PB-220□	22.00	M	465.0	558.0	760	650
GNRT6012PB-330□	33.00	M	580.0	696.0	590	550
GNRT6012PB-470□	47.00	M	965.0	1158.0	520	460
GNRT6012PB-680□	68.00	M	1160.0	1392.0	440	410
GNRT6012PB-101□	100.00	M	1670.0	2004.0	350	320

■ Inductance test Freq. : 100KHz / 1.0V

■ L-Tolerance : N = 30% , M = 20%

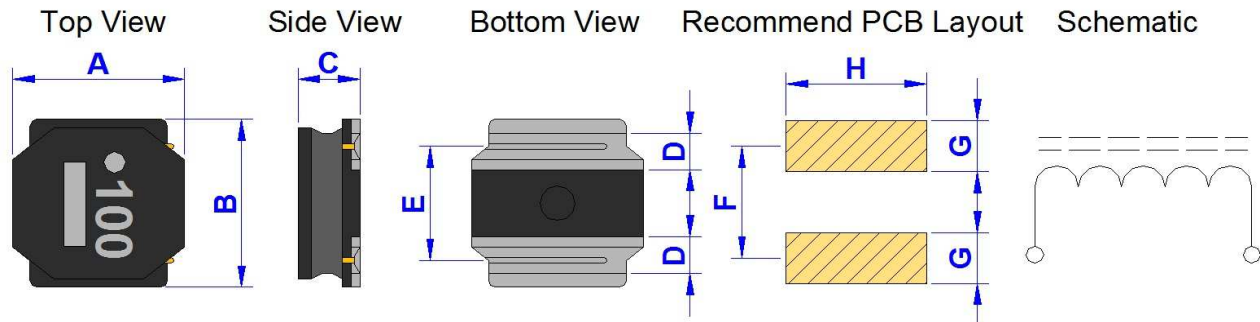
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Irms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT6020PB-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
6020PB	6.00 +/-0.2	6.00 +/-0.2	2.00	1.35	4.00	4.70	1.60	5.70

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT6020PB-R80□	0.80	N	20.0	24.0	6400	4100
GNRT6020PB-1R5□	1.50	N	26.0	31.2	4300	3600
GNRT6020PB-2R2□	2.20	N	34.0	40.8	3200	2900
GNRT6020PB-3R3□	3.30	N	40.0	48.0	2800	2750
GNRT6020PB-4R7□	4.70	N	58.0	69.6	2400	2150
GNRT6020PB-6R8□	6.80	N	85.0	102.0	2000	1800
GNRT6020PB-100□	10.00	M	125.0	150.0	1900	1500
GNRT6020PB-220□	22.00	M	290.0	348.0	1250	950

■ Inductance test Freq. : 100KHz / 1.0V

■ L-Tolerance : N = 30% , M = 20%

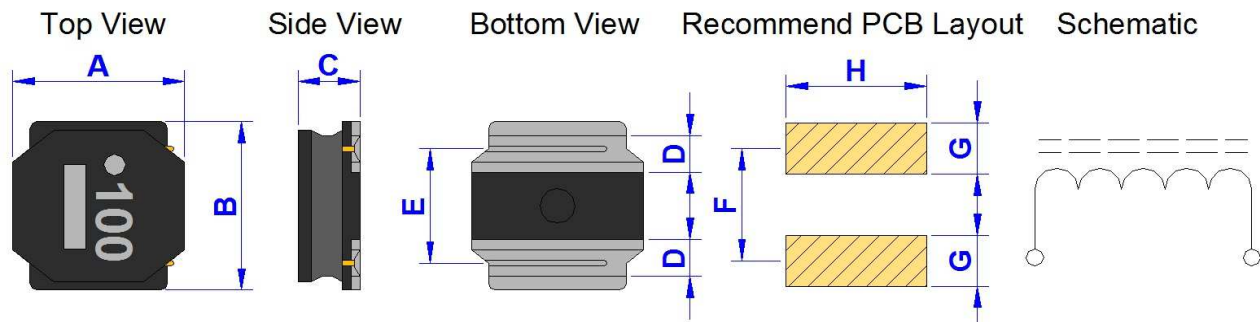
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Irms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT6028PB-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
6028PB	6.00 +/-0.2	6.00 +/-0.2	2.80	1.35	4.00	4.70	1.60	5.70

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT6028PB-R90□	0.90	N	13.0	15.6	6700	4600
GNRT6028PB-1R5□	1.50	N	16.0	19.2	5100	4200
GNRT6028PB-2R2□	2.20	N	20.0	24.0	4200	3700
GNRT6028PB-3R0□	3.00	N	23.0	27.6	3600	3400
GNRT6028PB-4R7□	4.70	M	31.0	37.2	2700	3000
GNRT6028PB-6R0□	6.00	M	40.0	48.0	2500	2500
GNRT6028PB-100□	10.00	M	65.0	78.0	1900	1900
GNRT6028PB-150□	15.00	M	95.0	114.0	1600	1800
GNRT6028PB-220□	22.00	M	135.0	162.0	1300	1400
GNRT6028PB-330□	33.00	M	220.0	264.0	1100	1100
GNRT6028PB-470□	47.00	M	300.0	360.0	1000	920
GNRT6028PB-680□	68.00	M	420.0	504.0	800	770
GNRT6028PB-101□	100.00	M	600.0	720.0	650	660

■ Inductance test Freq. : 100KHz / 1.0V

■ L-Tolerance : N = 30% , M = 20%

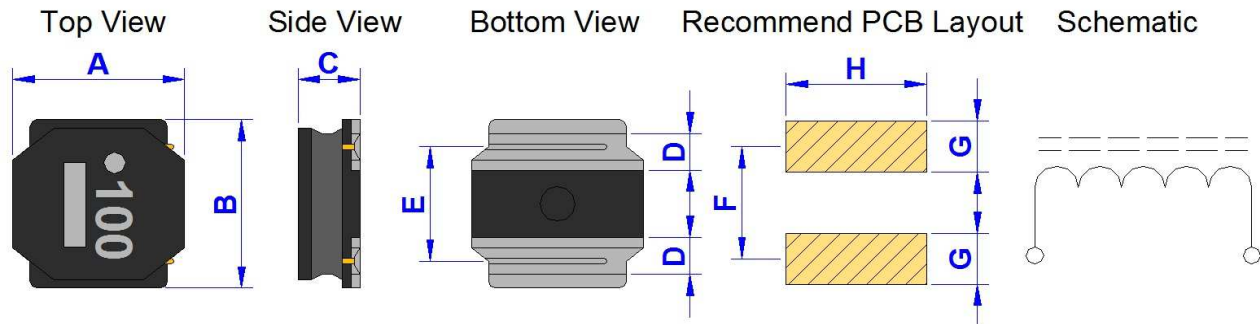
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Irms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT6045PB-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
6045PB	6.00 +/-0.2	6.00 +/-0.2	4.50	1.35	4.00	4.70	1.60	5.70

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT6045PB-1R0□	1.00	N	14.0	16.8	9800	4500
GNRT6045PB-1R3□	1.30	N	16.0	19.2	8200	4200
GNRT6045PB-2R3□	2.30	N	22.0	26.4	6400	3600
GNRT6045PB-3R0□	3.00	N	24.0	28.8	5600	3300
GNRT6045PB-4R5□	4.50	M	30.0	36.0	4400	3100
GNRT6045PB-100□	10.00	M	46.0	55.2	3100	2400
GNRT6045PB-150□	15.00	M	70.0	84.0	2500	1900
GNRT6045PB-220□	22.00	M	107.0	128.4	2000	1600

■ Inductance test Freq. : 100KHz / 1.0V

■ L-Tolerance : N = 30% , M = 20%

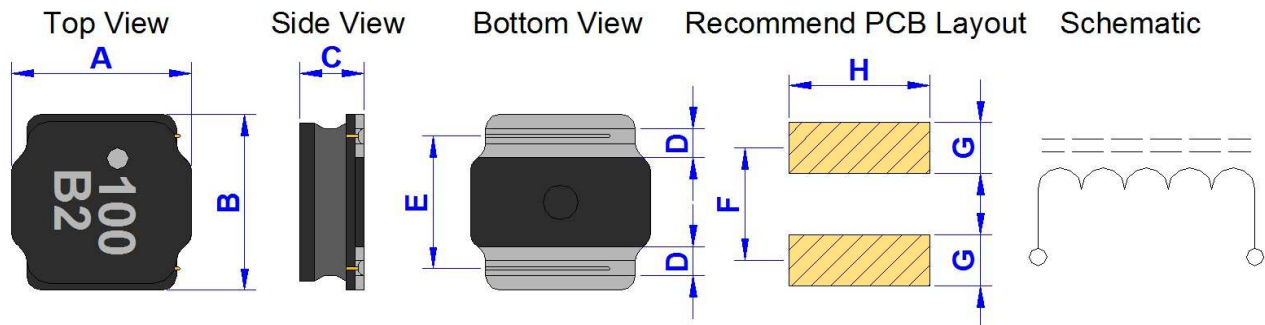
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Irms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT8030PB-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
8030PB	8.00 +/-0.2	8.00 +/-0.2	3.00	1.60	5.60	5.60	1.80	7.50

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT8030PB-1R0□	1.00	N	9.0	10.8	7800	6200
GNRT8030PB-1R5□	1.50	N	12.0	14.4	6200	5300
GNRT8030PB-2R2□	2.20	N	15.0	18.0	4900	4800
GNRT8030PB-3R3□	3.30	M	19.0	22.8	4200	4300
GNRT8030PB-4R7□	4.70	M	22.0	26.4	3600	4000
GNRT8030PB-6R8□	6.80	M	29.0	34.8	3000	3400
GNRT8030PB-100□	10.00	M	33.0	39.6	2400	3000
GNRT8030PB-150□	15.00	M	60.0	72.0	2000	2200
GNRT8030PB-220□	22.00	M	70.0	84.0	1750	1900

■ Inductance test Freq. : 100KHz / 1.0V

■ L-Tolerance : N = 30% , M = 20%

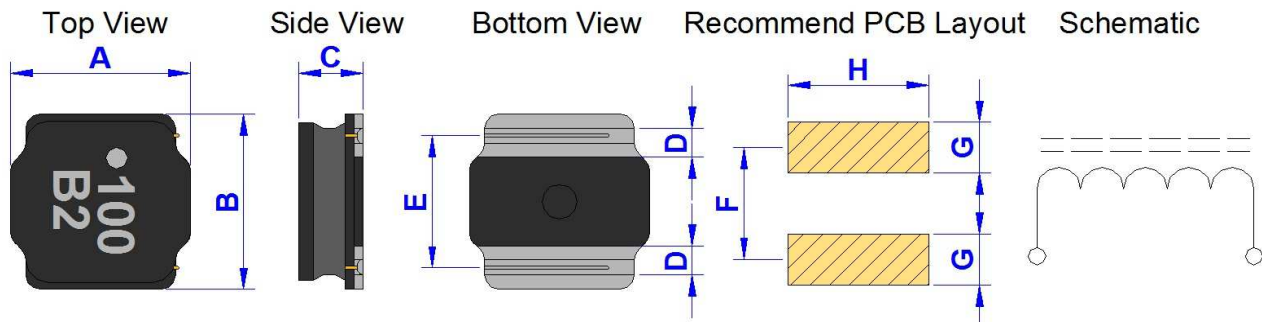
■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Irms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

GNRT8040PB-SERIES

Dimension [mm] :



Size Code	A	B	C (Max.)	D (+/-0.2)	E (+/-0.2)	F (Ref.)	G (Ref.)	H (Ref.)
8040PB	8.00 +/-0.2	8.00 +/-0.2	4.00	1.60	5.60	5.60	1.80	7.50

Electrical Characteristics :

GOTREND PN	Inductance (uH)	L-Tolerance	RDC (m Ohm) Typ.	RDC (m Ohm) Max.	Isat (mA) Max.	Irms (mA) Typ.
GNRT8040PB-R90□	0.90	N	6.0	7.2	13000	7800
GNRT8040PB-1R4□	1.40	N	7.0	8.4	10000	7000
GNRT8040PB-2R0□	2.00	N	9.0	10.8	8100	6300
GNRT8040PB-3R6□	3.60	N	15.0	18.0	6400	4900
GNRT8040PB-4R7□	4.70	N	18.0	21.6	5400	4100
GNRT8040PB-6R8□	6.80	N	25.0	30.0	4400	3700
GNRT8040PB-100□	10.00	M	34.0	40.8	3800	3100
GNRT8040PB-150□	15.00	M	50.0	60.0	2900	2400
GNRT8040PB-220□	22.00	M	66.0	79.2	2400	2200

■ Inductance test Freq. : 100KHz / 1.0V

■ L-Tolerance : N = 30% , M = 20%

■ The saturation current value (Isat) is the DC current value having inductance decrease down to 30%. (at 20°C)

■ The temperature rise current value (Irms) DC current value having temperature increase up to 40deg.C (at 20°C)

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

Care note :

Care note for Use :

(1) Storage Condition :

Temperature 25 to 35 deg.C , Humidity 45 to 60% RH

(2) Use Temperature :

- a. Minimum Temperature : -40 deg.C Ambient temperature of this product.
- b. Maximum Temperature : +125 deg.C The value of temperature including ambient and temperature rise of this product.
- c. Reliability test temperature range from -40 ~ +125 deg.C
- d. However, this is not meant as temperature grade guarantee for UL.

(3) Model :

When this product was used in a similar or as new product to the original one, sometimes it might be unable to satisfy the specifications due to difference in condition of usage.

(4) Drop :

If this product suffered mechanical stress such as drop, characteristics may become poor (due to damage on coil / bobbin / ferrite ... etc.)
Never use such stressed product.

Care note for Safety :

(1) Provision to Abnormal Condition :

This product itself does not have any protective function in abnormal condition such as overload, short-circuit and open-circuit conditions, etc.
Therefore, it shall be confirmed from the end product that there is no risk of smoking, fire, dielectric withstand voltage insulation resistance,etc. in abnormal conditions to provide protective devices and /or protection circuit in the end product.

(2) Temperature Rise :

Temperature rise on this product depends on the installation condition on end products.
It shall be confirmed on the actual end product that temperature rise of this product is within the specified temperature class limit.

(3) Dielectric Strength :

Dielectric withstanding test with higher voltage than specific value will damage insulating material and shorten its life.

(4) Water :

This product must not be used in wet condition resulted from water, coffee or any liquid contact because insulation strength becomes very low under such condition.

(5) Potting :

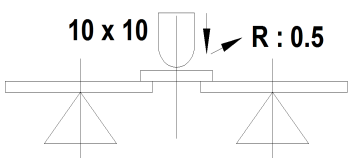
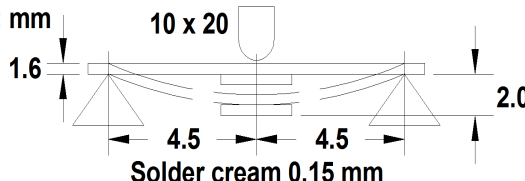
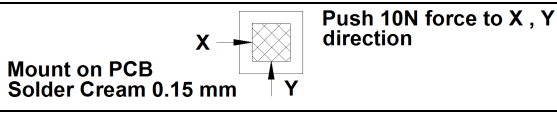
If this product is potted in some compound, coating material of magnet wire might be occasionally damaged. Please ask us if you intend to pot this product.

(6) Detergent :

Please consult our company immediately once under such circumstances because product reliability confirmation etc. is needed when this product come in contact with these chemicals.

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

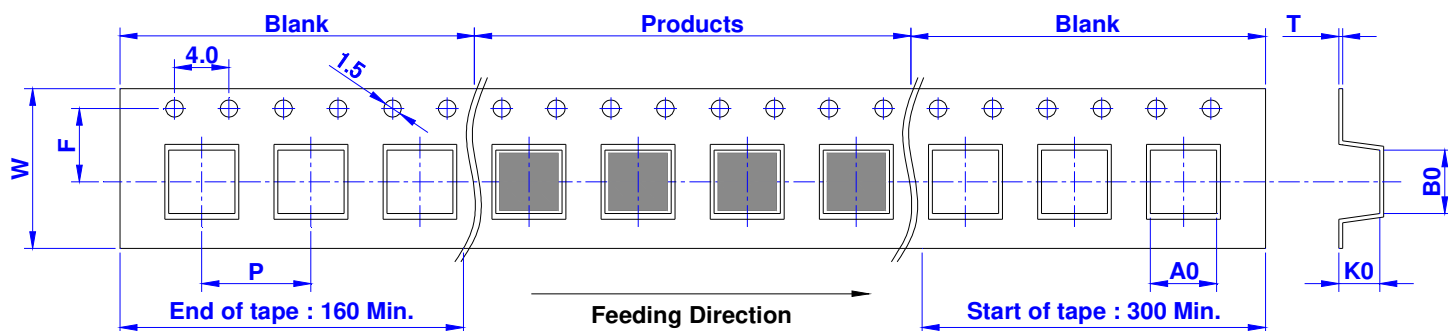
Reliability :

SN	Test Item	Test Condition	Specification		
1	Dimension	Actual Size ...	Meet Spec		
2	Thermal Shock (Temperature Cycle)	Temperature : -40 ~ +125 deg.C kept stabilized for 30 min. each Cycle : 100 Cycles (power off)	Elec. no variation Appearance no deformation		
3	Humidity Resistance	Humidity : 90% ~ 95% RH Temperature : 60 ± 2 deg.C · Test Time : 96 ± 2 Hours	Elec. no variation Appearance no deformation		
4	High Temperature	Temperature : 125 ± 2 deg.C Testing Time : 96 ± 2 Hours	Elec. no variation Appearance no deformation		
5	Low Temperature	Temperature : -40 ± 2 deg.C Time : 96 ± 2 Hours	Elec. no variation Appearance no deformation		
6	Temperature and Humidity Cycle	Temperature	Humidity	Time	Elec. no variation Appearance no deformation
		25 deg.C	90% ~ 95% RH	3.0 Hr	
		55 deg.C	95% ~ 96% RH	5.0 Hr	
		25 deg.C	90% ~ 95% RH	3.0 Hr	
		Cycle : 20 Cycles			
7	Vibration	Frequency : 10Hz ~ 55Hz · Amplitude : 1.5 mm Direction : X · Y · Z · Time : 2 Hours each	Elec. no variation Appearance no deformation		
8	Solderability	Go through real SMT IR-Reflow The profile like our suggest profile. Preheat : 160 ± 10 deg.C (90 sec) Peak : 245 ± 5 deg.C Peak Time : 50 Sec. / up 217 deg.C	Elec. no variation Appearance no deformation		
9	Soldering Heat Resistance	Preheat : 160 ± 10 deg.C (90 sec) Solder : Sn / Ag / Cu (Pb Free) Solder Temp. : 260 ± 5 deg.C · Time : 3 ± 1 seconds	Elec. no variation Appearance no deformation		
10	Iron Solder Heat Resistance	Solder Temp. : 350 ± 5 deg.C Flux : Rosin · Time : 3 ± 1 seconds	Elec. no variation Appearance no deformation		
11	Bending Strength	Unit : mm  Force : 1Kg / min.	Elec. no variation Appearance no deformation		
12	Flexure Strength	Unit : mm  Solder cream 0.15 mm	Elec. no variation Appearance no deformation		
13	Terminal Strength	 Mount on PCB Solder Cream 0.15 mm Push 10N force to X , Y direction	Elec. no variation Appearance no deformation		
14	High-Voltage	100 V DC between core & winding	Elec. no variation Appearance no deformation		
15	Load life	Temperature : 25 ± 3 deg.C Load : Allowed DC Current · Test Time : 96 ± 2 Hours	Elec. no variation Appearance no deformation		

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

Packaging Information :

Tape Dimension (mm) :

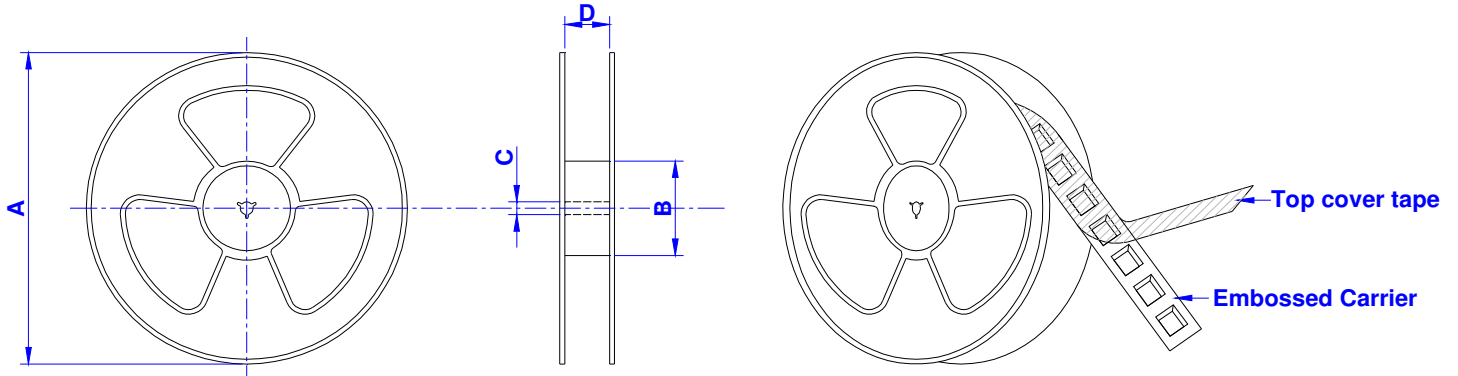


Size / mm	W	P	A0	B0	K0	T	F
201610P	8.0 +/- 0.2	4.0 +/- 0.1	2.0 +/- 0.1	2.5 +/- 0.1	1.4 +/- 0.1	0.23 +/- 0.05	3.5 +/- 0.05
201610PH	8.0 +/- 0.2	4.0 +/- 0.1	2.0 +/- 0.1	2.5 +/- 0.1	1.4 +/- 0.1	0.23 +/- 0.05	3.5 +/- 0.05
201612P	8.0 +/- 0.2	4.0 +/- 0.1	2.0 +/- 0.1	2.5 +/- 0.1	1.4 +/- 0.1	0.23 +/- 0.05	3.5 +/- 0.05
2012PB	8.0 +/- 0.2	4.0 +/- 0.1	2.2 +/- 0.1	2.2 +/- 0.1	1.3 +/- 0.1	0.25 +/- 0.05	3.5 +/- 0.05
2410PA	8.0 +/- 0.2	4.0 +/- 0.1	2.6 +/- 0.1	2.6 +/- 0.1	1.3 +/- 0.1	0.25 +/- 0.05	3.5 +/- 0.05
2412PA	8.0 +/- 0.2	4.0 +/- 0.1	2.6 +/- 0.1	2.6 +/- 0.1	1.3 +/- 0.1	0.25 +/- 0.05	3.5 +/- 0.05
252010P	8.0 +/- 0.2	4.0 +/- 0.1	2.45 +/- 0.05	3.1 +/- 0.05	1.4 +/- 0.2	0.23 +/- 0.05	3.5 +/- 0.05
252010PB	8.0 +/- 0.2	4.0 +/- 0.1	2.45 +/- 0.05	3.1 +/- 0.05	1.4 +/- 0.2	0.23 +/- 0.05	3.5 +/- 0.05
252010PH	8.0 +/- 0.2	4.0 +/- 0.1	2.45 +/- 0.05	3.1 +/- 0.05	1.4 +/- 0.2	0.23 +/- 0.05	3.5 +/- 0.05
252012P	8.0 +/- 0.2	4.0 +/- 0.1	2.45 +/- 0.05	3.1 +/- 0.05	1.4 +/- 0.2	0.23 +/- 0.05	3.5 +/- 0.05
252012PH	8.0 +/- 0.2	4.0 +/- 0.1	2.45 +/- 0.05	3.1 +/- 0.05	1.4 +/- 0.2	0.23 +/- 0.05	3.5 +/- 0.05
3010PA	8.0 +/- 0.2	4.0 +/- 0.1	3.2 +/- 0.1	3.2 +/- 0.1	1.4 +/- 0.1	0.30 +/- 0.05	3.5 +/- 0.05
3012PA	8.0 +/- 0.2	4.0 +/- 0.1	3.2 +/- 0.1	3.2 +/- 0.1	1.6 +/- 0.1	0.30 +/- 0.05	3.5 +/- 0.05
3015P	8.0 +/- 0.2	4.0 +/- 0.1	3.2 +/- 0.1	3.2 +/- 0.1	1.9 +/- 0.1	0.30 +/- 0.05	3.5 +/- 0.05
4010PB	12.0 +/- 0.3	8.0 +/- 0.1	4.3 +/- 0.1	4.3 +/- 0.1	1.4 +/- 0.1	0.30 +/- 0.10	5.5 +/- 0.05
4012PB	12.0 +/- 0.3	8.0 +/- 0.1	4.3 +/- 0.1	4.3 +/- 0.1	1.6 +/- 0.1	0.30 +/- 0.10	5.5 +/- 0.05
4018PB	12.0 +/- 0.3	8.0 +/- 0.1	4.3 +/- 0.1	4.3 +/- 0.1	2.1 +/- 0.1	0.30 +/- 0.10	5.5 +/- 0.05
5012PB	12.0 +/- 0.3	8.0 +/- 0.1	5.25 +/- 0.1	5.25 +/- 0.1	1.4 +/- 0.1	0.30 +/- 0.10	5.5 +/- 0.05
5020PB	12.0 +/- 0.3	8.0 +/- 0.1	5.25 +/- 0.1	5.25 +/- 0.1	2.3 +/- 0.1	0.30 +/- 0.10	5.5 +/- 0.05
5040PB	12.0 +/- 0.3	8.0 +/- 0.1	5.15 +/- 0.1	5.15 +/- 0.1	4.2 +/- 0.1	0.40 +/- 0.10	5.5 +/- 0.05
6010PB	12.0 +/- 0.3	8.0 +/- 0.1	6.3 +/- 0.1	6.3 +/- 0.1	1.4 +/- 0.1	0.40 +/- 0.10	5.5 +/- 0.05
6012PB	12.0 +/- 0.3	8.0 +/- 0.1	6.3 +/- 0.1	6.3 +/- 0.1	1.6 +/- 0.1	0.40 +/- 0.10	5.5 +/- 0.05
6020PB	12.0 +/- 0.3	8.0 +/- 0.1	6.3 +/- 0.1	6.3 +/- 0.1	2.3 +/- 0.1	0.40 +/- 0.10	5.5 +/- 0.05
6028PB	12.0 +/- 0.3	8.0 +/- 0.1	6.3 +/- 0.1	6.3 +/- 0.1	3.1 +/- 0.1	0.40 +/- 0.10	5.5 +/- 0.05
6045PB	12.0 +/- 0.3	8.0 +/- 0.1	6.3 +/- 0.1	6.3 +/- 0.1	4.7 +/- 0.1	0.40 +/- 0.10	5.5 +/- 0.05
8030PB	16.0 +/- 0.3	12.0 +/- 0.1	8.3 +/- 0.1	8.3 +/- 0.1	3.4 +/- 0.1	0.50 +/- 0.10	7.5 +/- 0.05
8040PB	16.0 +/- 0.3	12.0 +/- 0.1	8.3 +/- 0.1	8.3 +/- 0.1	4.5 +/- 0.1	0.50 +/- 0.10	7.5 +/- 0.05

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

Packaging Information :

Reel Dimension (mm) :

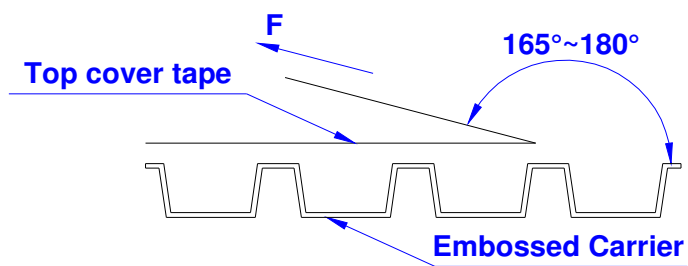


Size / mm	Reel Size	A	B	C	D	Qty / Reel
201610P	7" x 8 mm	178	60	13	8.5	2000 PCS
201610PH	7" x 8 mm	178	60	13	8.5	2000 PCS
201612P	7" x 8 mm	178	60	13	8.5	2000 PCS
2012PB	7" x 8 mm	178	60	13	8.5	2500 PCS
2410PA	7" x 8 mm	178	60	13	8.5	2500 PCS
2412PA	7" x 8 mm	178	60	13	8.5	2500 PCS
252010P	7" x 8 mm	178	60	13	8.5	2000 PCS
252010PB	7" x 8 mm	178	60	13	8.5	2000 PCS
252010PH	7" x 8 mm	178	60	13	8.5	2000 PCS
252012P	7" x 8 mm	178	60	13	8.5	2000 PCS
252012PH	7" x 8 mm	178	60	13	8.5	2000 PCS
3010PA	7" x 8 mm	178	60	13	8.5	2000 PCS
3012PA	7" x 8 mm	178	60	13	8.5	2000 PCS
3015P	7" x 8 mm	178	60	13	8.5	2000 PCS
4010PB	13" x 12 mm	330	100	13	12.5	4500 PCS
4012PB	13" x 12 mm	330	100	13	12.5	4500 PCS
4018PB	13" x 12 mm	330	100	13	12.5	3500 PCS
5012PB	7" x 12 mm	178	60	13	12.5	1000 PCS
5020PB	7" x 12 mm	178	60	13	12.5	800 PCS
5040PB	13" x 12 mm	330	100	13	12.5	1500 PCS
6010PB	7" x 12 mm	178	60	13	12.5	1000 PCS
6012PB	7" x 12 mm	178	60	13	12.5	1000 PCS
6020PB	13" x 12 mm	330	100	13	12.5	2000 PCS
6028PB	13" x 12 mm	330	100	13	12.5	2000 PCS
6045PB	13" x 12 mm	330	100	13	12.5	1000 PCS
8030PB	13" x 16 mm	330	100	13	16.5	1000 PCS
8040PB	13" x 16 mm	330	100	13	16.5	1000 PCS

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

Packaging Information :

Tearing Off Force :



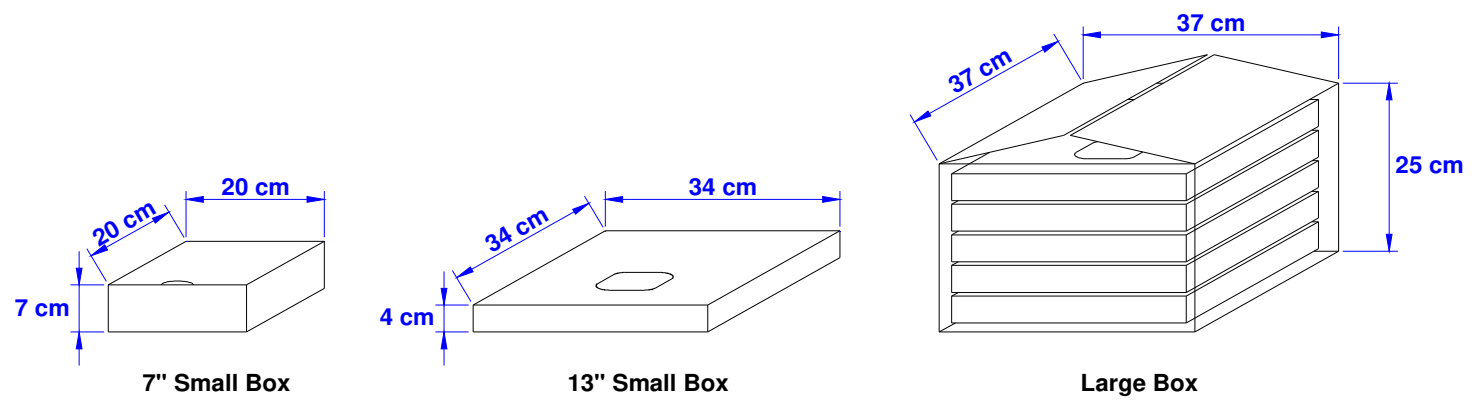
The force for tearing off cover tape is 10 to 130 grams in the arrow direction under the following conditions (referenced ANSI / EIA - 481 - D - 2008 of 4.11 standard).

Room Temp. (deg.C)	Room Humidity (%)	Room Atm. (hPa)	Tearing Speed (mm / min)
5 ~ 35	45 ~ 85	860 ~ 1060	300

Product Series : GNRT	Brand : GOTREND
File Version : GNRT-SERIES-V2R1	Editor : Teddy Sun
Established Date : 2012.02.17	Description : SMD Shielded Power Inductor
Latest Edit Date : 2020.10.30	Product Type : <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Customize

Packaging Information :

Box Package :



SIZE/mm	Reels in Small Box	Small Box in Large Box
201610P	5	8
201610PH	5	8
201612P	5	8
2012PB	5	8
2410PA	5	8
2412PA	5	8
252010P	5	8
252010PB	5	8
252010PH	5	8
252012P	5	8
252012PH	5	8
3010PA	5	8
3012PA	5	8
3015P	5	8
4010PB	2	5
4012PB	2	5
4018PB	2	5
5012PB	4	8
5020PB	4	8
5040PB	2	5
6010PB	4	8
6012PB	4	8
6020PB	2	5
6028PB	2	5
6045PB	2	5
8030PB	1	5
8040PB	1	5