Product Series Code	**GTXF**	Brand	GOTREND
File Version	GTXF-004-V0	Editor	Teddy
Established Date	2009.02.09	Description	SMD BALUM
Latest Edit Date	2010.03.09	Pages	Page : 2

Features & Application:

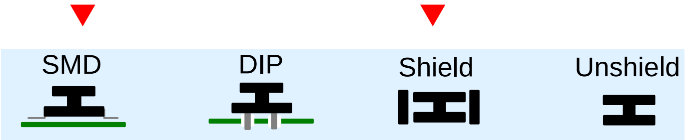
* Common Mode Filter for USB2.0 / IEEE1394

* Fit for power line & signal line circuit

* To help you go pass the CE/FCC standard.

* Mobile Device / Handheld Device / LowProfile Device / Panel...

Product Structure



2005 RoHS Compliant - SGS Certified Result

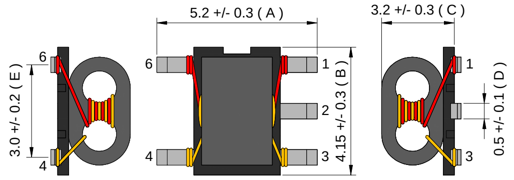
鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯 醚PBDE
<1000ppm	ND	ND	ND	ND	ND

Part No Example:

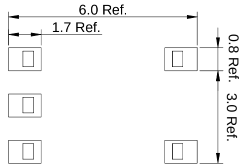
GTXF 004 P - 2R0 T
------- --------- --- ------ ---
1 2 3 4 5

1. GTXF : GOTREND Series
2. 004 : BALUN CORE with 6 Pin Base
3. P : Pb free <1000ppm
4. 2R0 : Insertion loss [dB] @ 100MHz = 2.0 Max.
5. T : GOTREND internal code

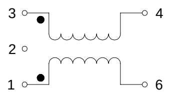
Dimension : [mm]



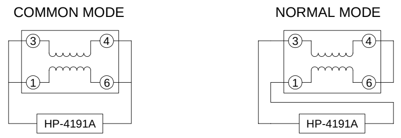
Dimension Layout Recommended



Connection : [Bottom View]



Test Circuit



Insertion loss :

Insertion loss	Specification (A)	Specification (B)
10 MHz	2.5 dB max.	Initial +/- 2.0 dB
100 MHz	2.0 dB max.	Initial +/- 1.5 dB
500 MHz	3.0 dB max.	Initial +/- 1.5 dB
1000 MHz	3.5 dB max.	Initial +/- 2.0 dB

Note :

* SPEC A is initial value

* SPEC B is permissable value or changes after environmental test

Test Equipment :

* HP8753E NETWORK ANALYZER

Standard Atmospheric Conditions:
Ambient Temp:20+/-15ºC
Relative Humidity:65+/-20%
If there may be any doubt on the result,
measurement shall be made within the following limits:
Ambient Temp:25+/-5ºC
Relative Humidity:75+/-10%

Electrical :

Item	Standards	Conditions	Test Equipment
Impedance	150 Ohm min.	25 MHz	HP-4191A
	400 Ohm min.	100 MHz	
DCR	120 m Ohm max.	DC Resistance	CH-502A
IDC	0.5 A max.	Rated Current	CH-1320
Withstand Voltage	100 VDC	NO Apparent at 100 VDC for 1 Minute Between	YD-2672
Insulation Resistance	100 M Ohm min.	Over 100 M Ohm at 100 VDC Between Pin-Pin	CH-9052A

Operating & Storage Condition:

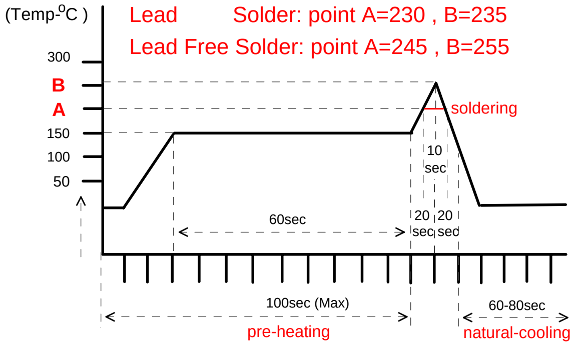
OPERATING TEMP:-40~+85ºC

STORAGE TEMP:-40~+85ºC
STORAGE LIFE TIME: 12 MONTH @25ºC , RH 65%

Attention & Caution:

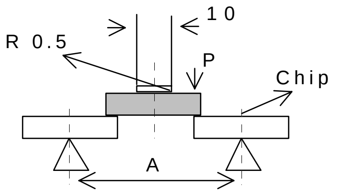
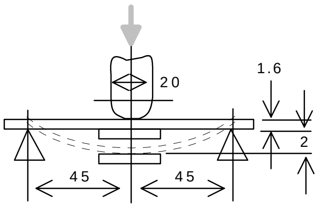
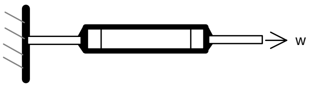
Please avoid following matters:
- Splashing water or salt water
- Toxic Gas (Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia)
- Vibrations or shocks which exceed the specified condition
- Dew condenses
- Please be careful for the stress to this product by board flexure or something after the mounting.

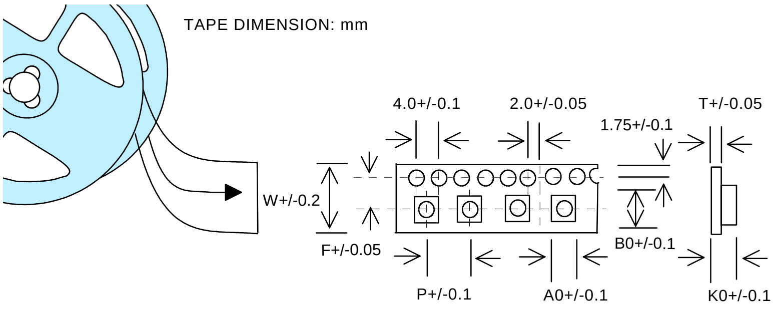
Recommand Reflow Curve (TIME:Second)

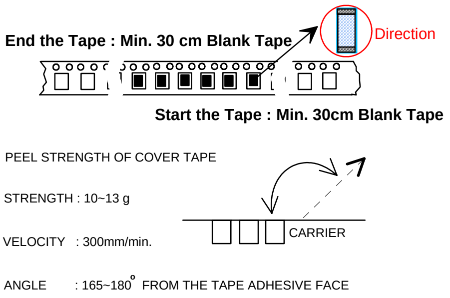


Notice: Iron Soldering: 3 Seconds Max. @260°C

Reliability Test Result :

NO	ITEM	TEST CONDITIONS	REMARKS
1	Thermal Shock (Temperature Cycle) 溫度循環試驗	Temperature:-40 ° C/ +85 ° C kept stabilized for 30 minutes each Cycle: 100 Cycles	Inductance value shall be within ± 10% of the initial value. Q-factor shall be within ± 30% of the initial value. Impedance shall be within ± 20% of the initial value. DCR value shall be within ± 20% of the initial value.
2	Humidity Resistance 耐濕試驗	Humidity: 90%~ 95% RH Temperature: 40± 2 ° C Test Time: 1000± 12 Hours	■NO.1~4 Measurement:After placing for 24 hours (min.)
3	HighTemperature 耐熱試驗	Temperature: 85± 2 ° C Humidity: 20% Testing Time: 1000± 12 Hours	■NO.2~3 Applied current(spec): Rated current(maximum value)
4	Low Temperature 耐寒試驗	Temperature: -40 ± 2 ° C Time: 1000± 12 Hours	
5	Temperature and Humidity Cycle 溫/濕度循環試驗	Step | Temp | Humidity | Time 1 | 25± 2 ° C | 95~100%RH | 3.0Hr 2 | 55± 2 ° C | 95~96%RH | 9.5Hr 3 | 25± 2 ° C | 95~100%RH | 9.5Hr	■NO.5 Cycle: 5 cycles
6	Vibration 振動性試驗	Frequency: 10Hz~55Hz Amplitude: 1.5mm Direction: X,Y,Z Time: 2 Hours each	
7	IR Reflow Soldering 焊錫性試驗	Solder: H63A(eutectic solder) Solder Temp.: 230± 5 ° C Time: 6 minutes Cycles: x 1	Impedance(inductance) shall be within ± 20% of the initial value. DCR value shall be within ± 20% of the initial value.
8	Soldering Heat Resistance 耐熱 焊性試驗	Preheat:120 ~ 150 ° C (60 sec) Solder:H63A(eutectic solder) Solder Temp.: 260 ± 5 ° C Flux: Rosin Dip time: 10± 1 seconds	The chip must have no cracks.More than 75% of the terminal electrode must be covered with solder.
9	Bending Strength 折斷力試驗		The terminal electrode and the ferrite must not be damaged by the forces applied on the test conditions. ≧ 3 kg
10	Flexure Strength 彎曲試驗		No mechanical damage shall be noticed even when the board is bent 2 mm
11	Terminal Strength 拉力試驗		The terminal electrode and the ferrite must not be damaged by the forces applied on the test conditions. ≧ 2.0kg





PEEL STRENGTH OF COVER TAPE

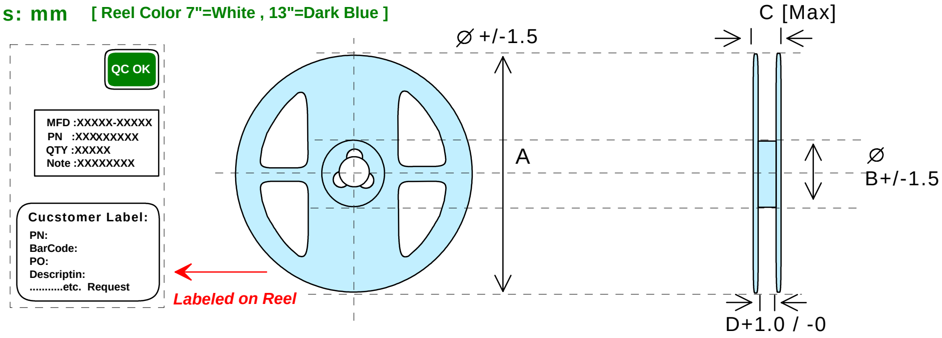
STRENGTH : 10~13 g

VELOCITY : 300mm/min.

ANGLE : 165~180° FROM THE TAPE ADHESIVE FACE

SIZE/m	A0	B0	F	P	K0	W	T
GTXF	4.40	5.70	5.50	8.00	3.40	12.00	0.40

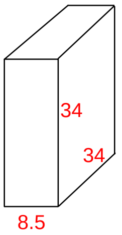
Reel Dimensions: mm [Reel Color 7"=White , 13"=Dark Blue]



SIZE / mm	A	B	C	D	REEL SIZE	QTY/REEL
GTXF	330	100	18.5	12.5	13”	2.0K

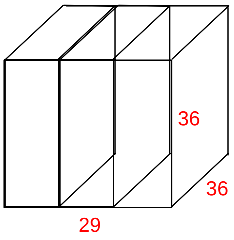
BOX Package: Unit: cm

4 Reel in



Inner Small Box

3 Inner Small Box in



Outter Large Box