### SPECIFICATION FOR APPROVAL

#### **♦ FEATURES**

Compact Size

Miniaturized SMD package in low profile and light weight.

Low loss

Low insertion loss, high attenuation.

· High Soldering Heat Resistance

High quality termination allows both flow and re-flow soldering methods to be applied.

Characteristics

Eliminates noise over a wide frequency range. Idea for high frequency and space limited designs.

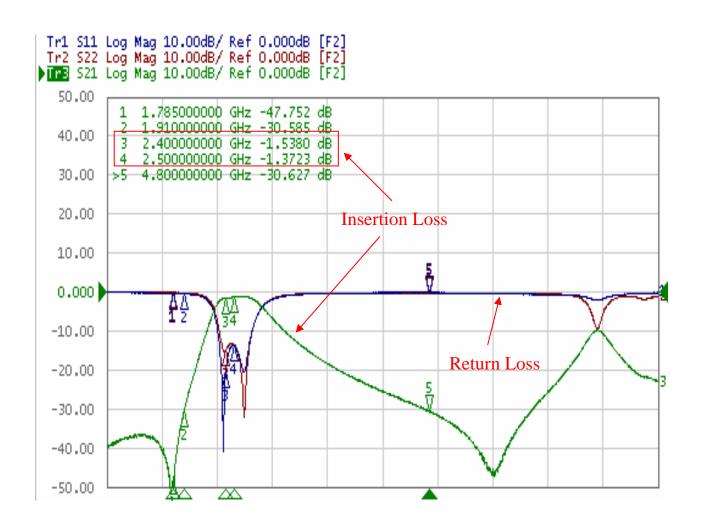
- Internal Shielding incorporated
- Available in tape and reel packaging for automatic mounting

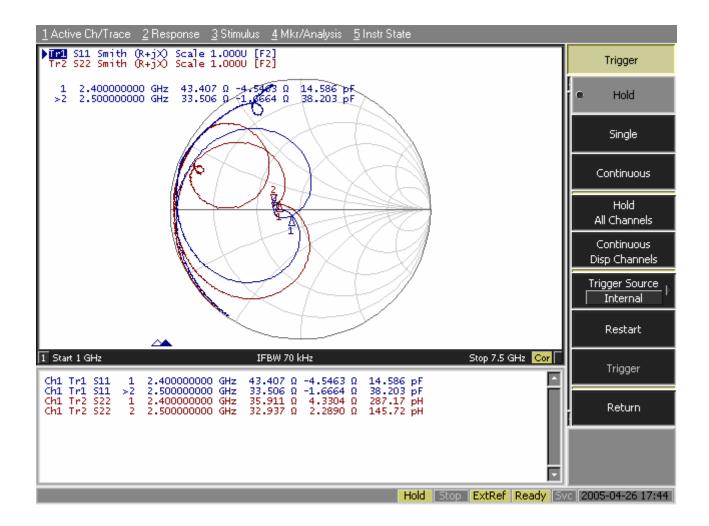
#### **♦ PART NUMBERING**

- ① Product Code
- ② Dimension Code
- ③ Series Type (### represents center frequency and xx represents material type)
- Design Code

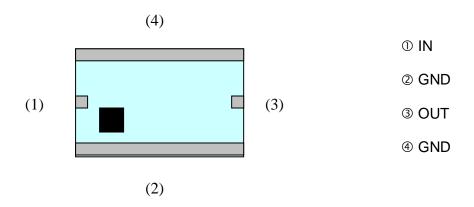
CUSTOMER:	сиѕтомі			ER'S PART NO. / DWG NO.			
ITEM/PART NO.: LTB-2520-2G4H3-A2							
DIMENSION: (m/m)	NSION: (m/m)			2.5±0.20	mm		
			W	$2.0 \pm 0.20$	mm		
L-	L		Т	1.0±0.15 (max.)	mm		
T			а	$0.5 \pm 0.2$	mm		
>			b	$0.3 \pm 0.15$	mm		
		<u>d</u>	С	$0.3 \pm 0.15$	mm		
<u> </u>	<del>*</del>						
<u>→                                     </u>	Ω						
T	_						
<b>⊢</b>							
<u>y</u>							
Electrical Specifications			TEST INS	STRUMENT:			
Pass Band	2400-2500 MHz		Agilent E5071A Network Analyzer				
Insertion Loss in BW	2.0 dB max.						
Return Loss	10 dB min.						
Impedance	50 Ohm						
	30dB min at 880 MHz~915 MHz						
Attenuation	30dB min. at 1710~1785MHz		1				
	25dB min. at 1850~1910MHz						
	25dB min. at 4800~5000MHz						
DRAWN BY	CHECKED BY APPRO		VED BY	SAMPLE NO	Э.		

### **Electrical Characteristic**

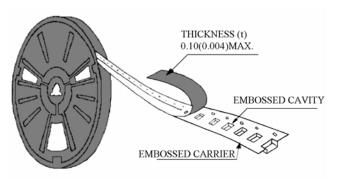




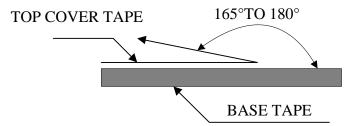
# **Pin Assignment**



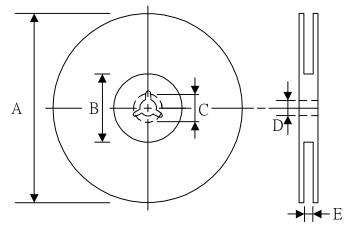
## **PACKAGING FOR PRODUCT**



The force for tearing off cover tape is 10 grams in the arrow direction.

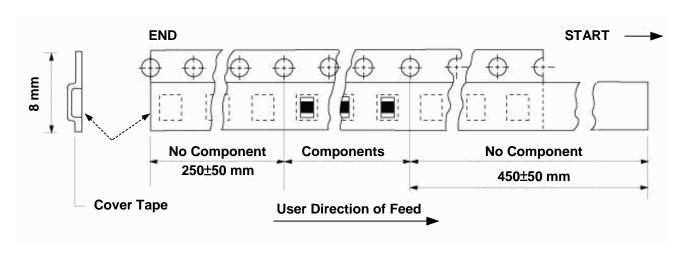


### **CARRIER TAPE REELS**



SERIES	453215	451616	322513	321611	201209
			321616		160808
PCS/Reel	1000	2000	2500	3000	4000

TYPE	A	В	С	D	E
8 mm	178 ±0.2	62 ±0.2	20.2 ±0.1	13 ±0.1	9 ±0.1
12 mm	178 ±0.3	60 ±0.2	19.3 ±0.1	13.5 ±0.1	13.6 ±0.1



# **RELIABILITY TEST**

Item	Condition	Specification
Thermal shock	-40°C~+85°C for 200 cycles each cycle being 30 min	No apparent damage Fulfill the electrical spec. after test
Humidity resistance	85±2°C, 80~90% R.H. for 500 hours	No apparent damage Fulfill the electrical spec. after test
High temperature resistance	+85±2°C for 500 hours	No apparent damage Fulfill the electrical spec. after test
Low temperature resistance	-40±3°C for 500 hours	No apparent damage Fulfill the electrical spec. after test
Vibration	10 Hz/min~55 Hz/min~10 Hz/min vibration frequency with 1.5 mm amplitude for two hours in x, y, z directions	No apparent damage
Drop shock	Dropped onto printed circuit board from 100cm height three times in x, y, z directions.  The terminals shall be protected.	No apparent damage
Soldering heat resistance	Preheating temperature : 150±10°C Preheating time : 1 to 2 minutes Solder bath temperature : 260±5°C Bathing time : 5±0.5 seconds	No apparent damage
Bending test onto printed circuit board	Solder specimen LTCC components on the test printed circuit board (L: 100 x W: 40 x T: 1.6mm) in appended recommended PCB pattern. Apply the load in direction of the arrow until bending reaches 2 mm.	No apparent damage
Solderability	The dipped surface of the terminal shall be at least 75% covered with solder after dipped in solder bath of 235±5°C for 3±0.5 seconds.	No apparent damage