

BF 2520 Series[Preliminary]

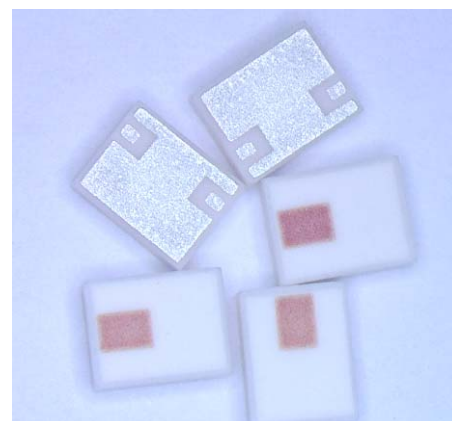
Multilayer Chip Band-Pass Filters

Features

- ❖ Ultra small SMD type with low loss at pass-band and high attenuation at stop-band.
- ❖ RoHS compliant

Applications

- ❖ 5th generation mobile communication systems



Specifications

Part Number	Frequency Range (GHz)	Insertion Loss @ BW (dB)	VSWR @ BW	Frequency (GHz)	Attenuation (dB)
BF2520-VUR2RBA_	26.5~30.0	2.2 max @25°C 2.5 max @ -40°C~85°C	1.67 typ. 2.0 max.	DC ~ 20	28 min.
				20~24.5	18 min.
				32.5~33	18 min.
				33~40	20 min.

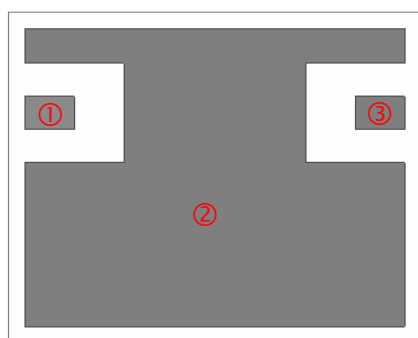
Q'ty/Reel (pcs) : 3,000
 Operating Temperature Range : -40 ~ +85 °C
 Storage Temperature Range : -40 ~ +85 °C
 Storage Period : 12 months max.
 Power Capacity : 1W max.

Part Number

BF 2520 - V UR2 RBA □ /LF
 ① ② ③ ④ ⑤ ⑥ ⑦

① Type	BF : Band-Pass Filter	② Dimensions (L × W)	2.5 × 2.0 mm
③ Material Code	V	④ Frequency Range	UR2=28.2GHz
⑤ Specification Code	RBA	⑥ Packaging	T: Tape & Reel B: Bulk
⑦ Soldering	/LF=lead-free		

Terminal Configuration

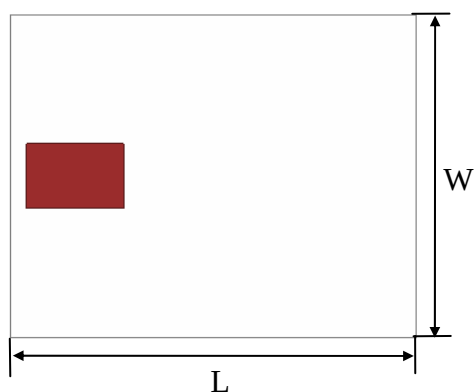


<Bottom View>

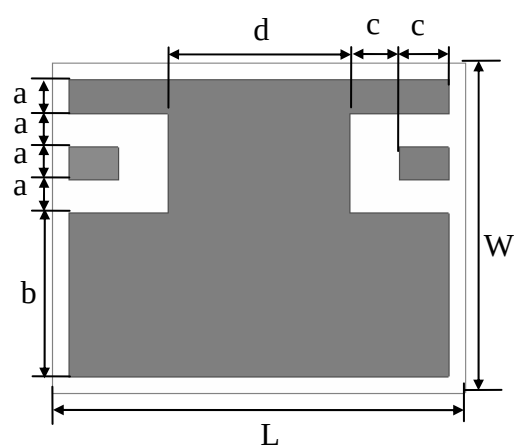
No.	Terminal Name	No.	Terminal Name
①	IN	③	OUT
②	GND		

Dimensions and Recommended PC Board Pattern

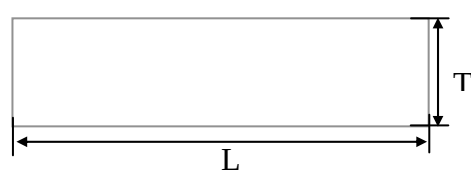
Unit : mm



<Top View>

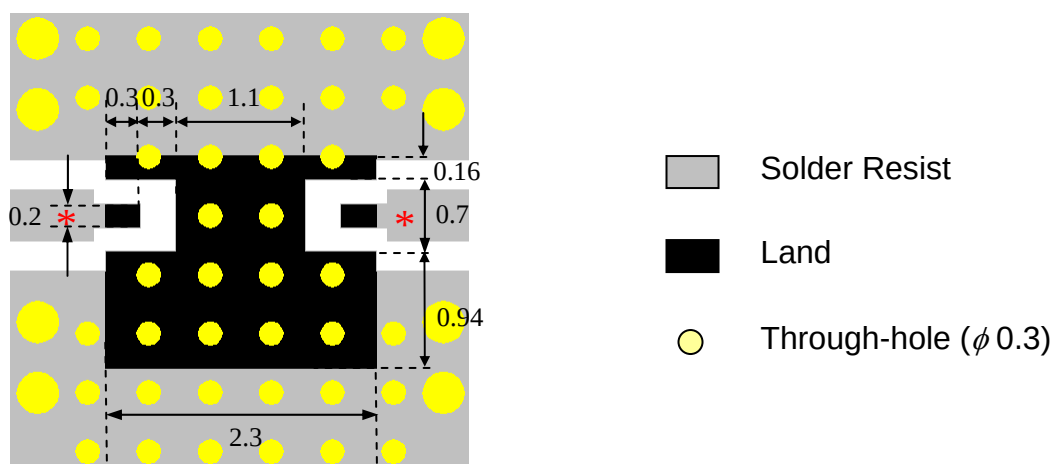


<Bottom View>



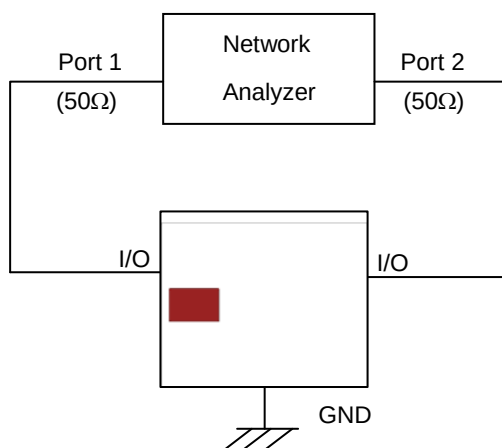
<Side View>

Mark	L	W	T	a	b	c	d
Dimensions	2.5 ± 0.15	2.0 ± 0.15	0.9 max	0.20 + 0.1/-0.05	1.0 ±0.1	0.3 ±0.1	1.1 ±0.1

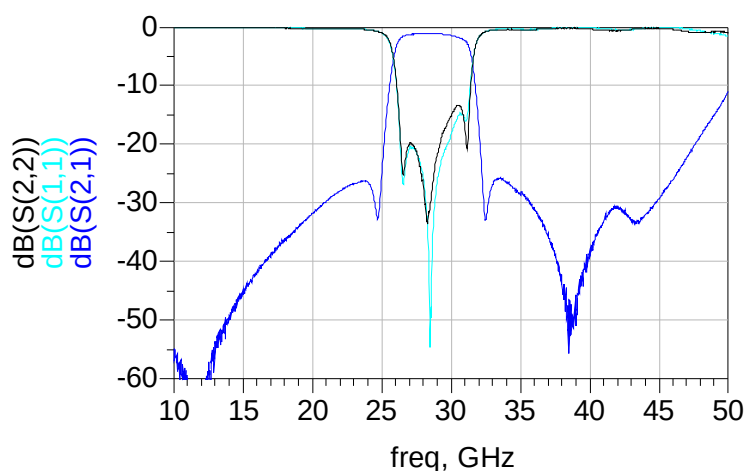


* Line width should be designed to match 50 Ω characteristic impedance, depending on PCB material and thickness.

Measuring Diagram



Electrical Characteristics (T=25°C)

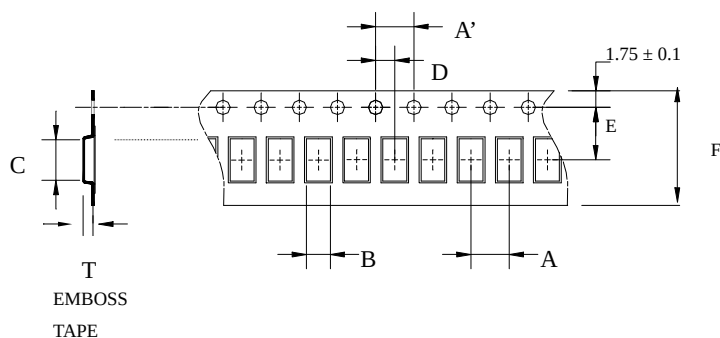


Notes

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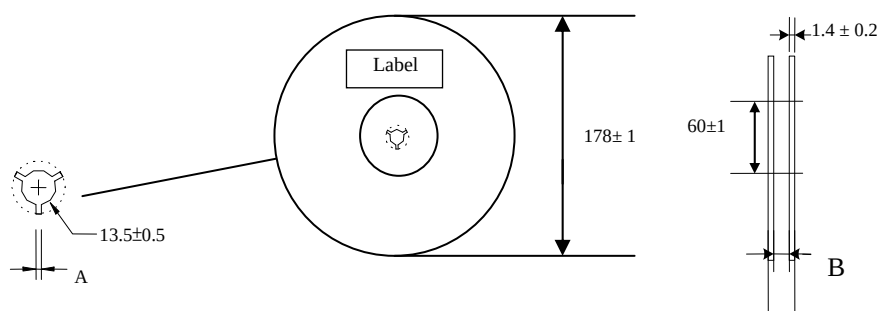
Taping Specifications

❖ Tape Dimensions (Unit: mm) & Quantity



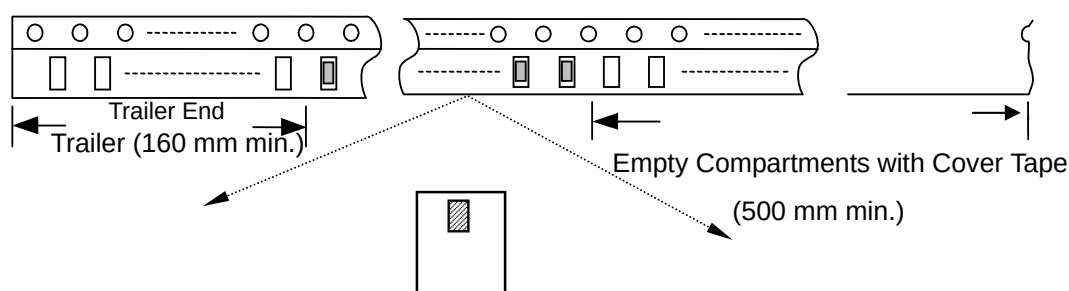
Type	A	A'	B	C	D	E	F	T	Quantity/reel	Tape material
2520	4.0±0.1	4.0±0.1	2.35±0.1	2.80±0.1	2.0±0.1	3.5±0.1	8.0±0.1	1.15±0.10	3,000pcs	Plastic (Embossed)

❖ Reel Dimensions (Unit: mm)

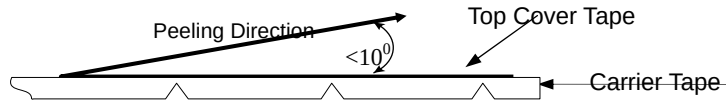


Type	A	B
2520	2.3±0.5	9.0±0.3

❖ Leader and Trailer Tape



❖ Peel-off Force



Peel-off force should be in the range of 0.1 – 0.6 N at a peel-off speed of 300 ± 10 mm/min .

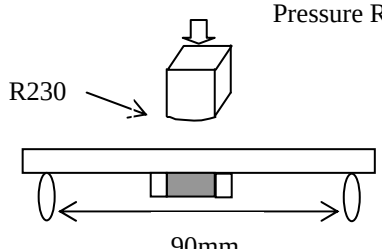
❖ Storage Conditions

- (1) Temperature: 5 ~35°C , relative humidity (RH): 45~75%.
- (2) Non-corrosive environment.

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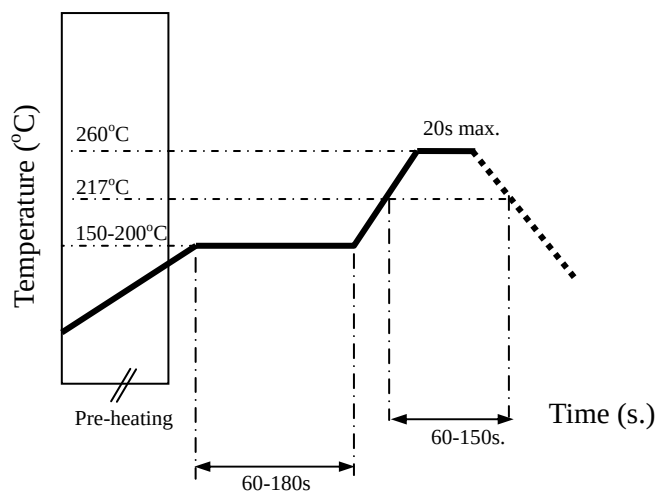
Mechanical & Environmental Characteristics

Item	Requirements	Procedure
Solderability	1. No apparent damage 2. More than 95% of the terminal electrode shall be covered with new solder	1. Preheat: $120 \pm 5^{\circ}\text{C}$ 2. Solder: $245 \pm 5^{\circ}\text{C}$ for 5 ± 1 sec
Soldering strength (Termination Adhesion)	1. 10N minimum	1. Solder specimen onto test jig. 2. Apply push force at 0.5mm/s until electrode pads are peeled off or ceramic are broken. Pushing force is applied to longitude direction.
Deflection (Substrate Bending)	1. No apparent damage	1. Solder specimen onto test jig (FR4, 1.6mm) using the recommend soldering profile. 2. Apply a bending force of 2mm deflection  Pressure Rod R230 90mm
Heat/Humidity Resistance	1. No apparent damage 2. Fulfill the electrical specification after test	1. Temperature: $85 \pm 2^{\circ}\text{C}$ 2. Humidity: 90% ~ 95% RH 3. Duration: 1000 ± 48 hrs 4. Recovery: 1-2hrs
Thermal shock (Temperature Cycle)	1. No apparent damage 2. Fulfill the electrical specification after test	1. One cycle/step 1 : $125 \pm 5^{\circ}\text{C}$ for 30 min step 2 : $-40 \pm 5^{\circ}\text{C}$ for 30 min 2. No of cycles : 100 3. Recovery: 1-2 hrs
Low Temperature Resistance	1. No apparent damage 2. Fulfill the electrical specification after test	1. Temperature: $-40 \pm 5^{\circ}\text{C}$ 2. Duration: 500 ± 24 hrs 3. Recovery: 1-2hrs

Soldering Conditions

❖ Typical Soldering Profile for Lead-free Process

Reflow Soldering :



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