

BF 5532 Series

Multilayer Chip Band-Pass Filters

Features

- ❖ Small SMD type with low loss at pass-band and high attenuation at stop-band.
- ❖ Plating Shielding-metal on component faces.
- ❖ HF & RoHS compliant.

Applications

- ❖ Wireless communication systems.



Specifications(at 25°C)

Part Number	Freq. Range (MHz)	Insertion Loss @ BW (dB)	Ripple @ BW (dB)	VSWR @ BW	Frequency (MHz)	Attenuation (dB)
BF5532-R6R5NURA5	5945 ~ 6105	3.4 typ. / 3.8 max.	1.5 typ. / 2.5 max.	2.0 max.	10 ~ 2000	58 min.
					2000 ~ 2100	55 min.
					2100 ~ 2400	55 min.
					2400 ~ 2570	55 min.
					2570 ~ 3400	50 min.
					3400 ~ 3870	50 min.
	6105 ~ 7125	1.6 typ. / 2.3 max.	0.6 typ. / 1.2max.	2.0 max.	3870 ~ 4400	55 min.
					4400 ~ 5170	48 min.
					5170 ~ 5725	40 min.
					5725 ~ 5825	40 min.
					11890 ~14250	20 min.
					17835 ~ 21375	10 min.

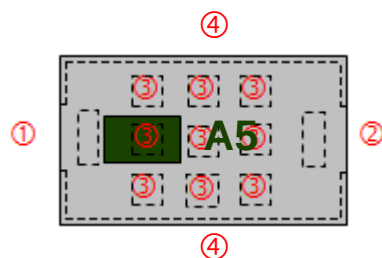
Q'ty/Reel (pcs) : 1000
 Operating Temperature Range : -40 ~ +85 °C
 Storage Temperature Range : -40 ~ +85 °C
 Storage Period : 12 months max.
 Power Capacity : 3W max.

Part Number

BF 5532 - R 6R5 NURA5 □ /LF
① ② ③ ④ ⑤ ⑥ ⑦

① Type	BF : Band-Pass Filter	② Dimensions (L × W)	5.5 × 3.2 mm
③ Material Code	R	④ Frequency Range	6R5=6500MHz
⑤ Specification Code	NURA5	⑥ Packaging	T: Tape & Reel B: Bulk
⑦ Soldering	/LF=lead-free		

Terminal Configuration

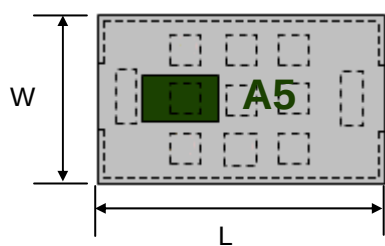


<Top View>

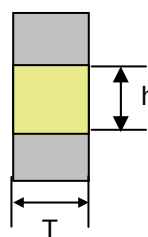
No.	Terminal Name	No.	Terminal Name
①	IN/OUT	③	GND
②	OUT/IN	④	GND

Dimensions and Recommended PC Board Pattern

Unit : mm



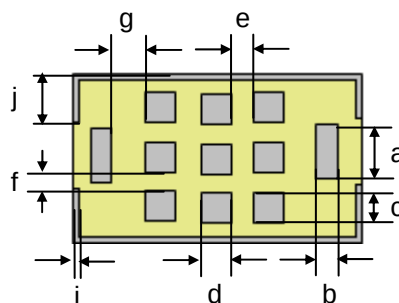
<Top View>



<Side View>



<Side View>

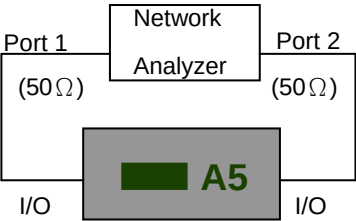


<Bottom View>

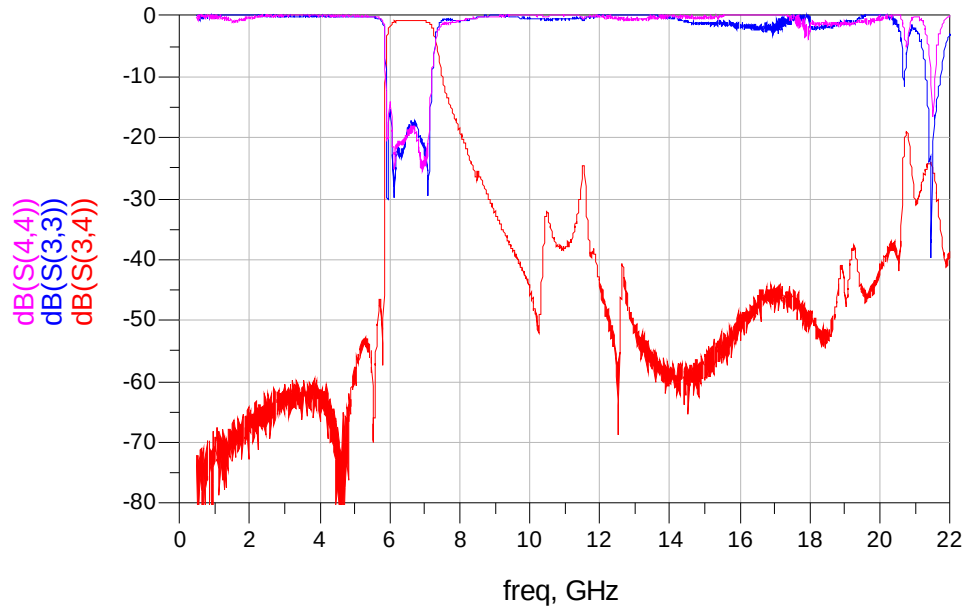
Mark	L	W	T	a	b	c	d	e	f	g	h
Dimensions	5.5 ± 0.2	3.2 ± 0.2	2.2 max.	0.8 ± 0.2	0.3 ± 0.2	0.5 ± 0.2	0.5 ± 0.2	0.5 ± 0.2	0.5 ± 0.2	0.7 ± 0.2	1.2 ± 0.2

Mark	i	j
Dimensions	0.25 max.	1.2 max.

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



Electrical Characteristics (T=25°C)

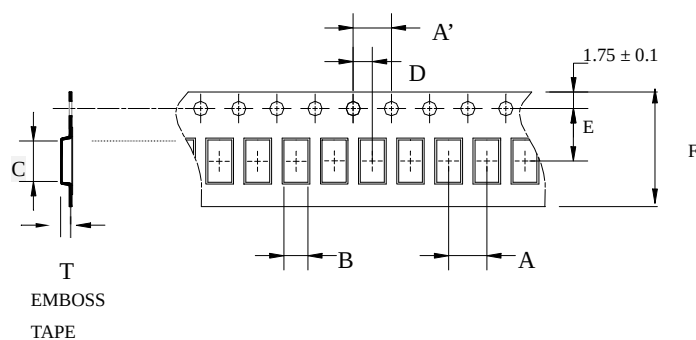


Notes

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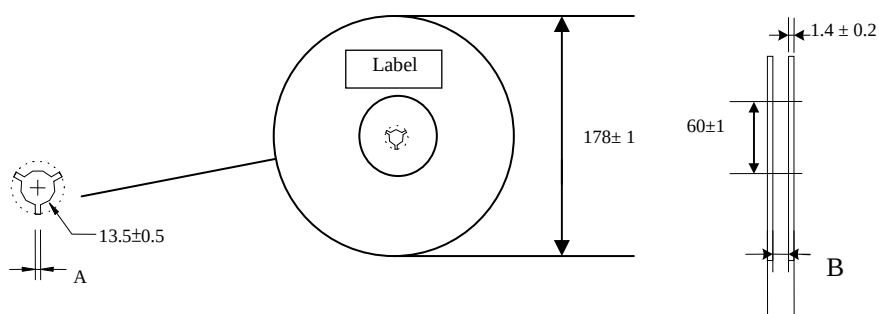
Taping Specifications

❖Tape & Reel Dimensions (Unit: mm)



Type	A	A'	B	C	D	E	F	T	Quantity/per reel	Tape material
5532	8.0±0.1	4.0±0.1	3.50±0.1	5.80±0.1	2.0±0.1	5.5±0.1	12.0±0.1	2.2±0.10	1,000pcs	Plastic (Embossed)

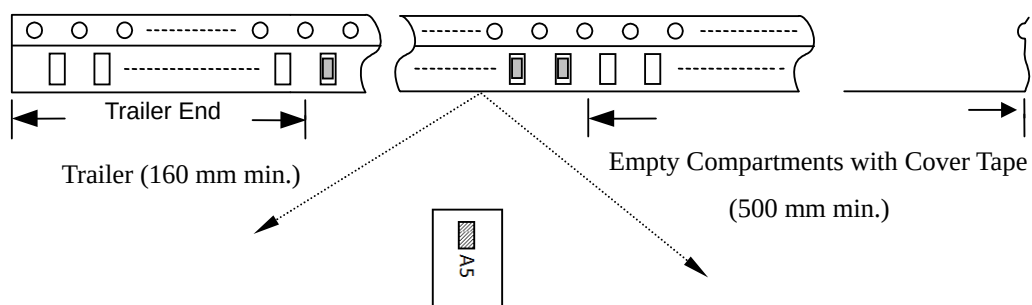
❖Reel Dimensions (Unit: mm)



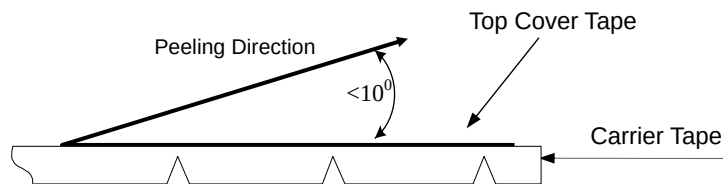
Label: Customer's Name,
ACX P/N, Q'ty, Date,
ACX Corp.

Type	A	B
5532	2.3±0.5	17.0±0.5

❖Leader and Trailer Tape



❖ Peel-off Force



Peel-off force should be in the range of 0.2N – 1.2N at a peel-off speed of 300 ± 10 mm/min .

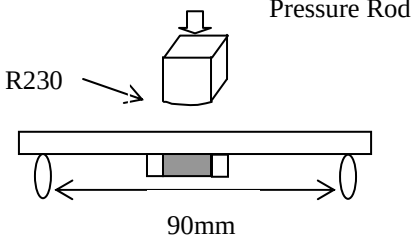
❖ Storage Conditions

- (1) Temperature: $5 \sim 35^{\circ}\text{C}$, relative humidity (RH): 45~75%.
- (2) Non-corrosive environment

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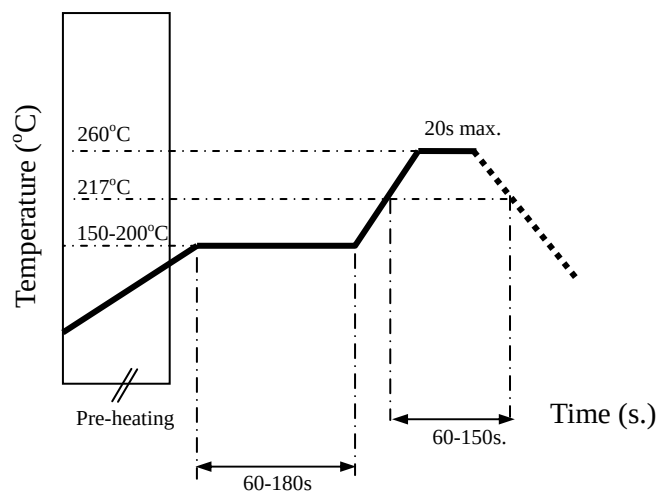
Mechanical & Environmental Characteristics

Item	Requirements	Procedure
Solderability	- No apparent damage - More than 95% of the terminal electrode shall be covered with new solder	- Preheat: $120 \pm 5^{\circ}\text{C}$ - Solder: $245 \pm 5^{\circ}\text{C}$ for 5 ± 1 sec
Soldering strength (Termination Adhesion)	10N minimum	- Solder specimen onto test jig. - 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)	No apparent damage	- Solder specimen onto test jig (FR4, 1.6mm) using the recommend soldering profile. - Apply a bending force of 1 mm deflection. 
Heat/Humidity Resistance	- No apparent damage - Fulfill the electrical specification after test	- Temperature: $85 \pm 2^{\circ}\text{C}$ - Humidity: 90% ~ 95% RH - Duration: 1000 ± 48hrs - Recovery: 1-2hrs
Thermal shock (Temperature Cycle)	- No apparent damage - Fulfill the electrical specification after test	- One cycle/step 1 : $125 \pm 5^{\circ}\text{C}$ for 30 min step 2 : $-40 \pm 5^{\circ}\text{C}$ for 30 min - No of cycles : 100 - Recovery: 1-2 hrs
Low Temperature Resistance	- No apparent damage - Fulfill the electrical specification after test	- Temperature: $-40 \pm 5^{\circ}\text{C}$ - Duration: 500 ± 24hrs - Recovery: 1-2hrs

Soldering Conditions

❖ Typical Soldering Profile for Lead-free Process

Reflow Soldering :



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