

BF 4532 Series

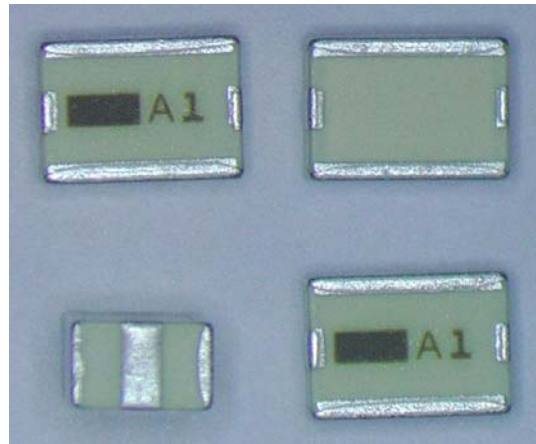
Multilayer Chip Band-Pass Filters

Features

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

Applications

- ❖ 6.1~7.12 GHz wireless communication systems



Specifications

Part Number	Freq. Range (MHz)	Insertion Loss @ BW (dB)	Ripple @ BW (dB)	VSWR @ BW	Frequency (MHz)	Attenuation (dB)
BF4532-R6R6CAA_	6100 ~7125	2.8 max.	2.2 max.	2.0 max.	30 ~ 1700	35 min.
					1980 ~ 2370	35 min.
					2400 ~ 2500	35 min.
					3960 ~ 4740	33 min.
					4740 ~ 5150	35 min.
					5170~ 5815	50 min.
					5815 ~ 5825	45 min.
					5825 ~ 5850	30 min.
					5900 ~ 5925	15 min.
					7925 ~ 8250	3 min.
					8250 ~ 9440	6 min.
					11890 ~ 14210	30 min.
17385 ~ 21315	10 min.					

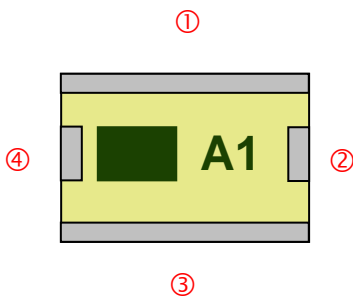
Q'ty/Reel (pcs) : 1000
 Operating Temperature Range : -40 ~ +85 °C
 Storage Temperature Range : -40 ~ +85 °C
 Storage Period : 12 months max.
 Power Capacity : 3W max.

Part Number

BF **4532** - **R** **6R6** **CAA** **□** **/LF**
 ① ② ③ ④ ⑤ ⑥ ⑦

① Type	BF : Band-Pass Filter	② Dimensions (L x W)	4.5 x 3.2 mm
③ Material Code	R	④ Frequency Range	6R6=6600MHz
⑤ Specification Code	CAA	⑥ Packaging	T: Tape & Reel B: Bulk
⑦ Soldering	/LF=lead-free		

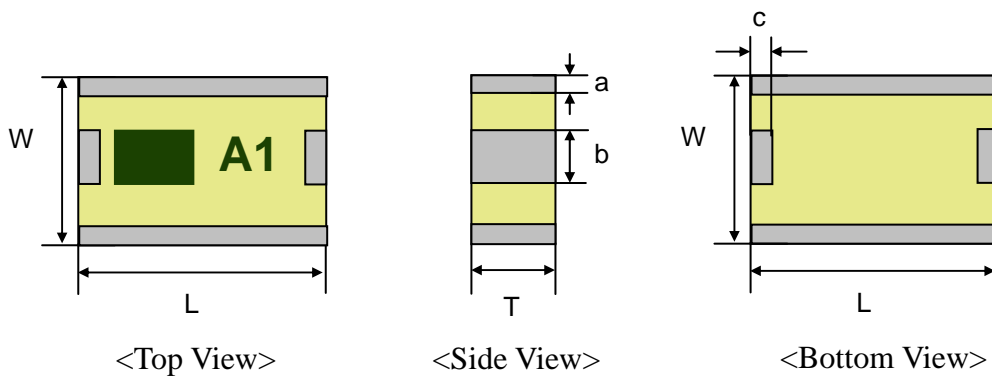
Terminal Configuration



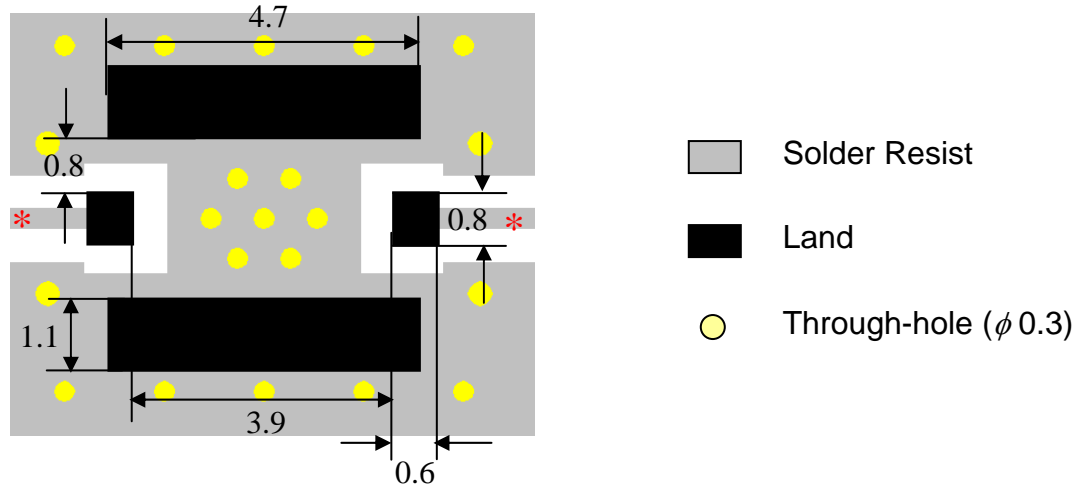
No.	Terminal Name	No.	Terminal Name
①	GND	③	GND
②	OUT/IN	④	IN/OUT

Dimensions and Recommended PC Board Pattern

Unit : mm

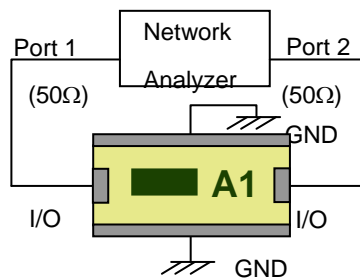


Mark	L	W	T	a	b	c
Dimensions	4.5 ±	3.2 ±	2.0 ±	0.4 ±	0.8 ±	0.3 ±
	0.2	0.2	0.15	0.2	0.2	0.15

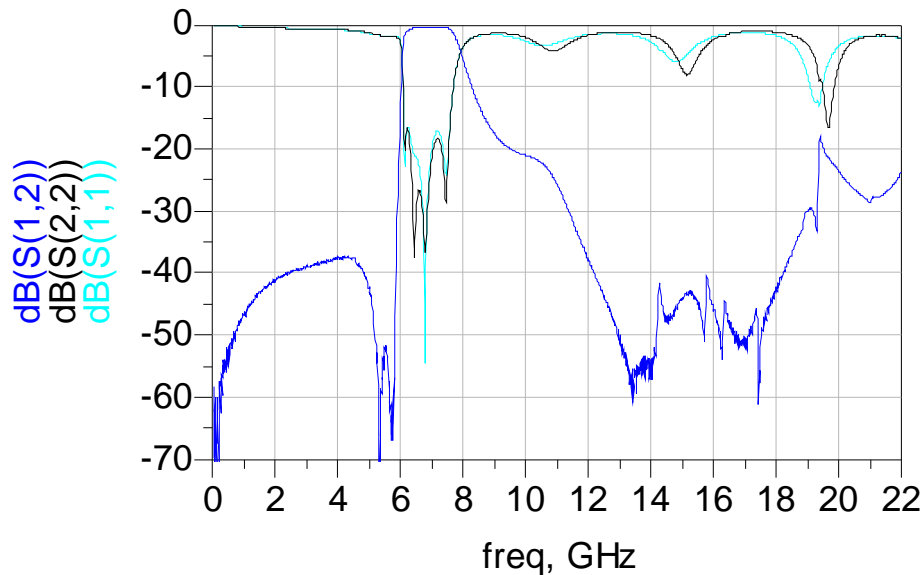


* Line width should be designed to match 50Ω characteristic impedance, depending on PCB material and thickness.

Measuring Diagram



Electrical Characteristics (T=25°C)

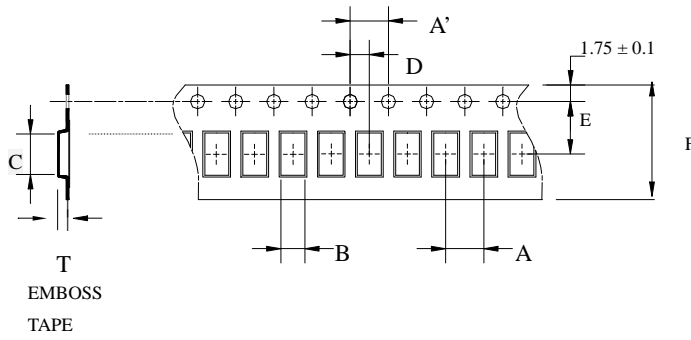


Notes

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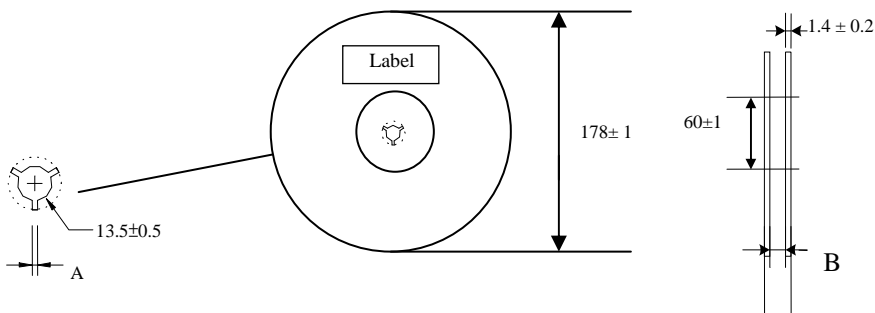
Taping Specifications

❖Tape & Reel Dimensions (Unit: mm) vs. Quantity (pcs)



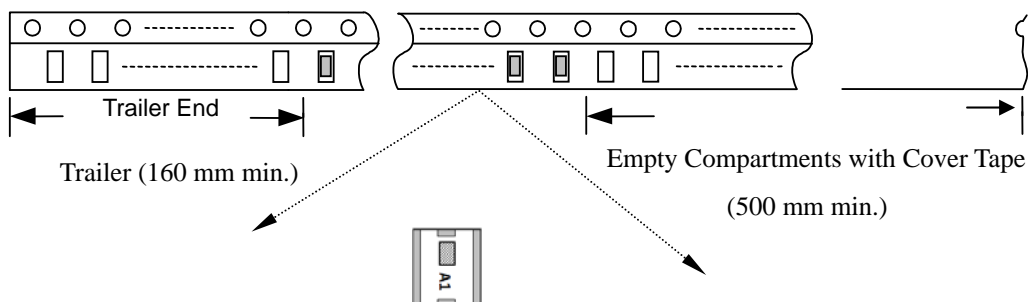
Type	A	A'	B	C	D	E	F	T	Quantity/per reel	Tape material
4532	8.0±	4.0±	3.50±	4.90±	2.0±	5.50±	12.0±	2.20±	1,000pcs	Plastic (Embossed)
	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10		

❖Reel Dimensions (Unit: mm)

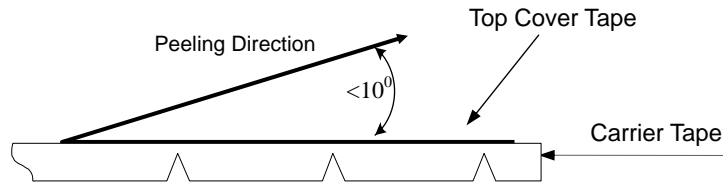


Type	A	B
4532	2.3±0.5	17.0±0.5

❖Leader and Trailer Tape



❖ **Peel-off Force**



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

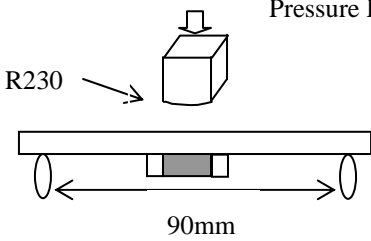
❖ **Storage Conditions**

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

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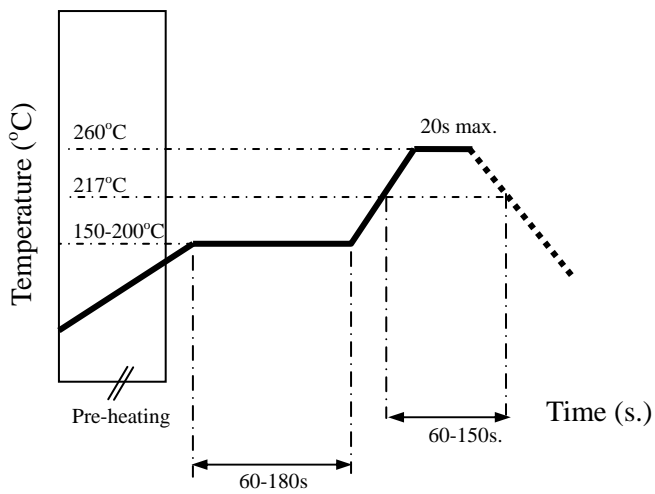
Mechanical & Environmental Characteristics

Item	Requirements	Procedure
Solderability	<ol style="list-style-type: none"> No apparent damage More than 95% of the terminal electrode shall be covered with new solder 	<ol style="list-style-type: none"> Preheat: $120 \pm 5^\circ\text{C}$ Solder: $245 \pm 5^\circ\text{C}$ for 5 ± 1 sec
Soldering strength (Termination Adhesion)	<ol style="list-style-type: none"> 10N minimum 	<ol style="list-style-type: none"> 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)	<ol style="list-style-type: none"> No apparent damage 	<ol style="list-style-type: none"> Solder specimen onto test jig (FR4, 1.6mm) using the recommend soldering profile. Apply a bending force of 1 mm deflection 
Heat/Humidity Resistance	<ol style="list-style-type: none"> No apparent damage Fulfill the electrical specification after test 	<ol style="list-style-type: none"> Temperature: $85 \pm 2^\circ\text{C}$ Humidity: 90% ~ 95% RH Duration: 1000 ± 48hrs Recovery: 1-2hrs
Thermal shock (Temperature Cycle)	<ol style="list-style-type: none"> No apparent damage Fulfill the electrical specification after test 	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> No apparent damage Fulfill the electrical specification after test 	<ol style="list-style-type: none"> 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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