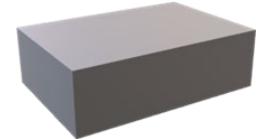


**CF1005-1**

**2450/6012 MHz  
LTCC Filter**



**SM1608-6**

- **Complies with Directive 2002/95/EC (RoHS)**
- **Moisture Sensitivity Level: 1**
- **AEC-Q200 Qualified**

**Absolute Maximum Ratings**

Rating	Value	Units
Operating Temperature Range	-40 to +105	°C
Storage Temperature Range	-40 to +85	°C
Impedance	50	Ohm

Case Style: SM1608-6, 1.6 x 0.8 mm Nominal Footprint

**Electrical Characteristics**

**Low Band**

<b>Frequency Range</b>	2400 ~ 2500 MHz
<b>Insertion Loss</b>	≤1.4 dB
<b>Return Loss (in BW)</b>	≥13 dB (2400 ~ 2500 MHz)
<b>Attenuation</b>	≥14 dB(700 ~ 1300 MHz) ≥21 dB(4800 ~ 5000 MHz) ≥27 dB(7200 ~ 7500 MHz)
<b>In/Output Impedance</b>	50Ω

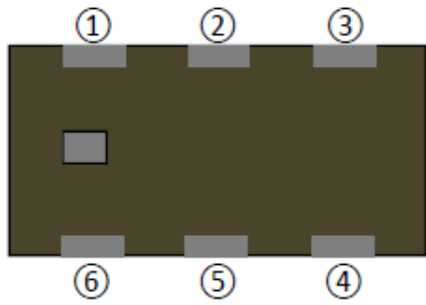
---

## Electrical Characteristics

### High Band

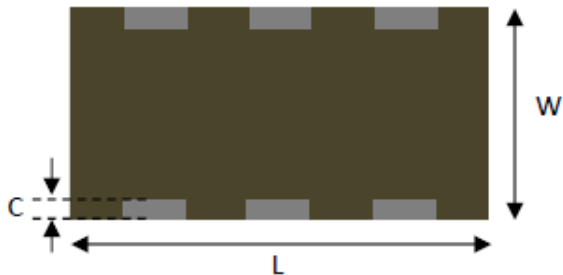
Parameters	Specifications
Frequency Range	4900 ~ 7125 MHz
Insertion Loss	$\leq 1.7$ dB
Return Loss (in BW)	$\geq 5$ dB (4900 ~ 7125 MHz)
Attenuation	$\geq 23$ dB(1200 ~ 1500 MHz) $\geq 26$ dB(1600 ~ 2000 MHz) $\geq 25$ dB(2300 ~ 3000 MHz) $\geq 28$ dB(10000 ~ 12000 MHz) $\geq 20$ dB(15000 ~ 16500 MHz) $\geq 10$ dB(16500 ~ 18000 MHz)
In/Output Impedance	50 $\Omega$

## Outline Drawing

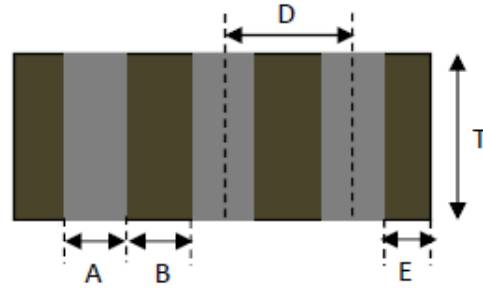


( Top View )

Number	Terminal Name	Number	Terminal Name
①	GND	④	Low band
②	Common port	⑤	GND
③	GND	⑥	High band



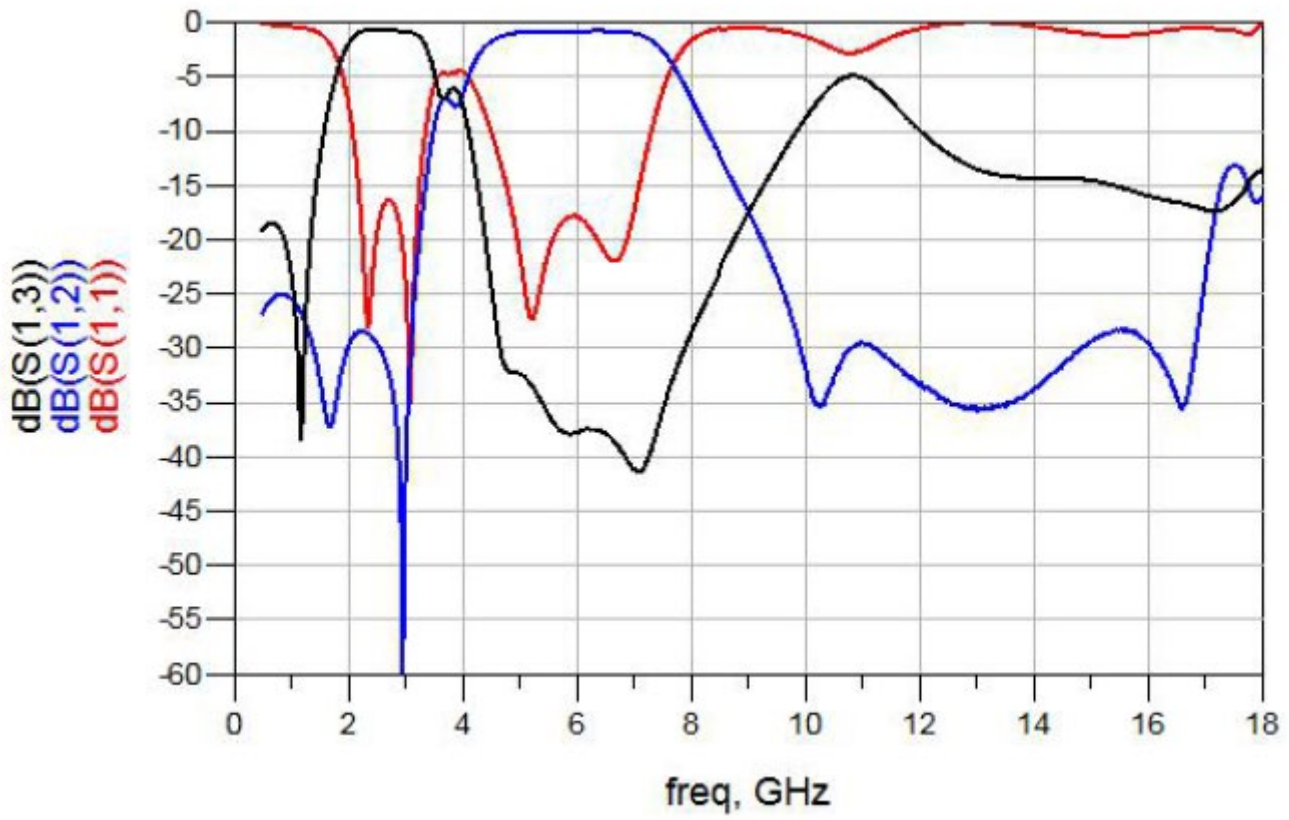
( Bottom View )



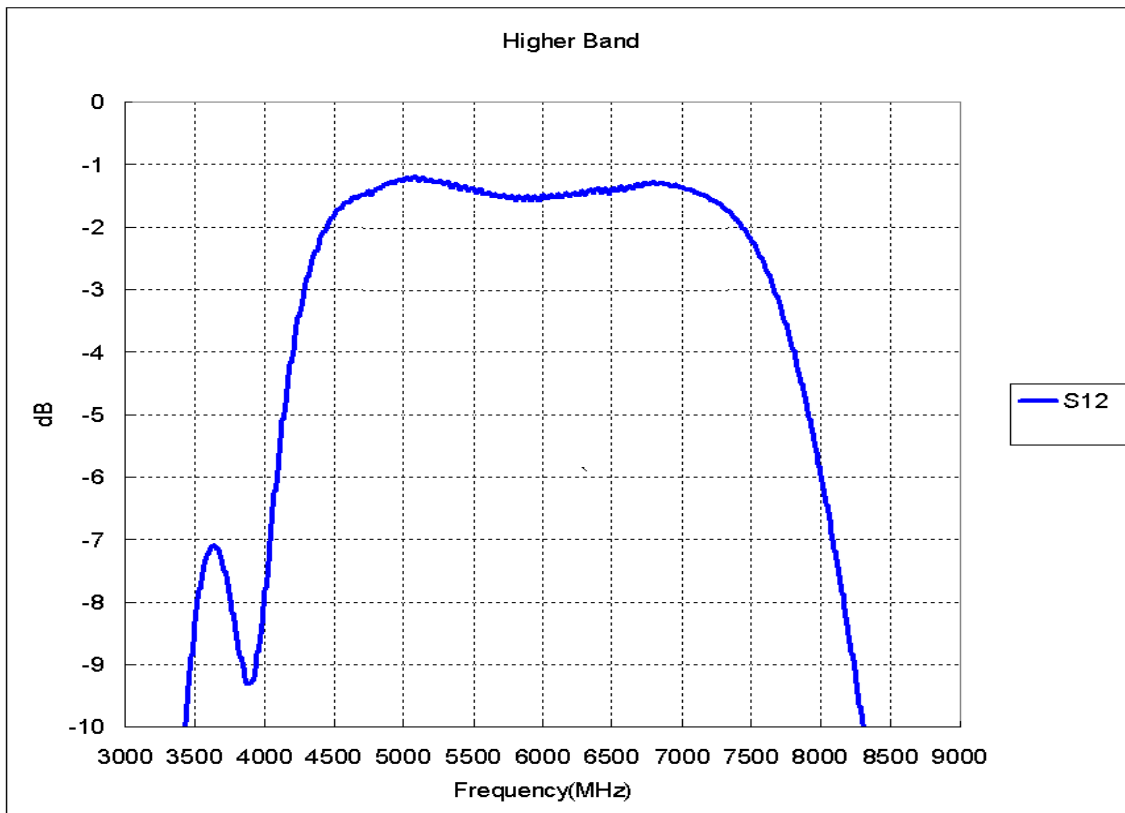
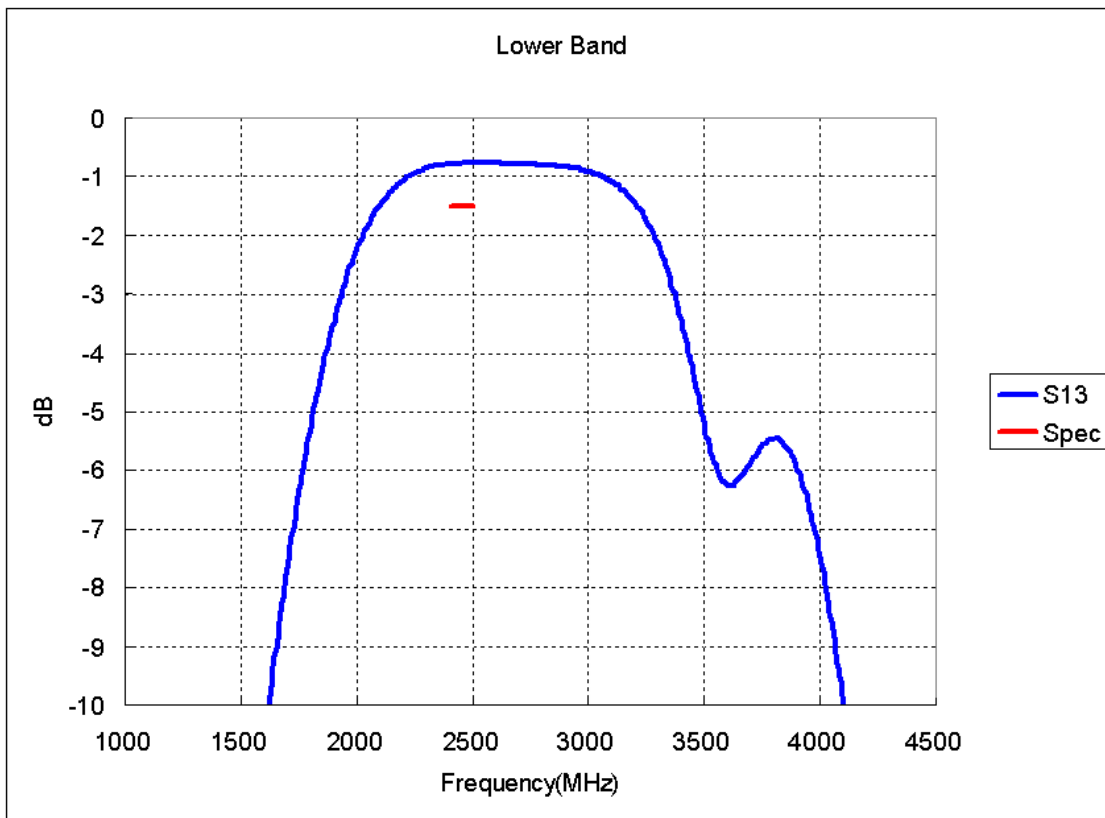
( Side View )

Symbols	L	W	T	A	B	C	D	E
Dimensions	1.6+/-0.2	0.8+/-0.2	0.6+/-0.2	0.25+/-0.1	0.25+/-0.1	0.2+/-0.1	0.5+/-0.1	0.175+/-0.1

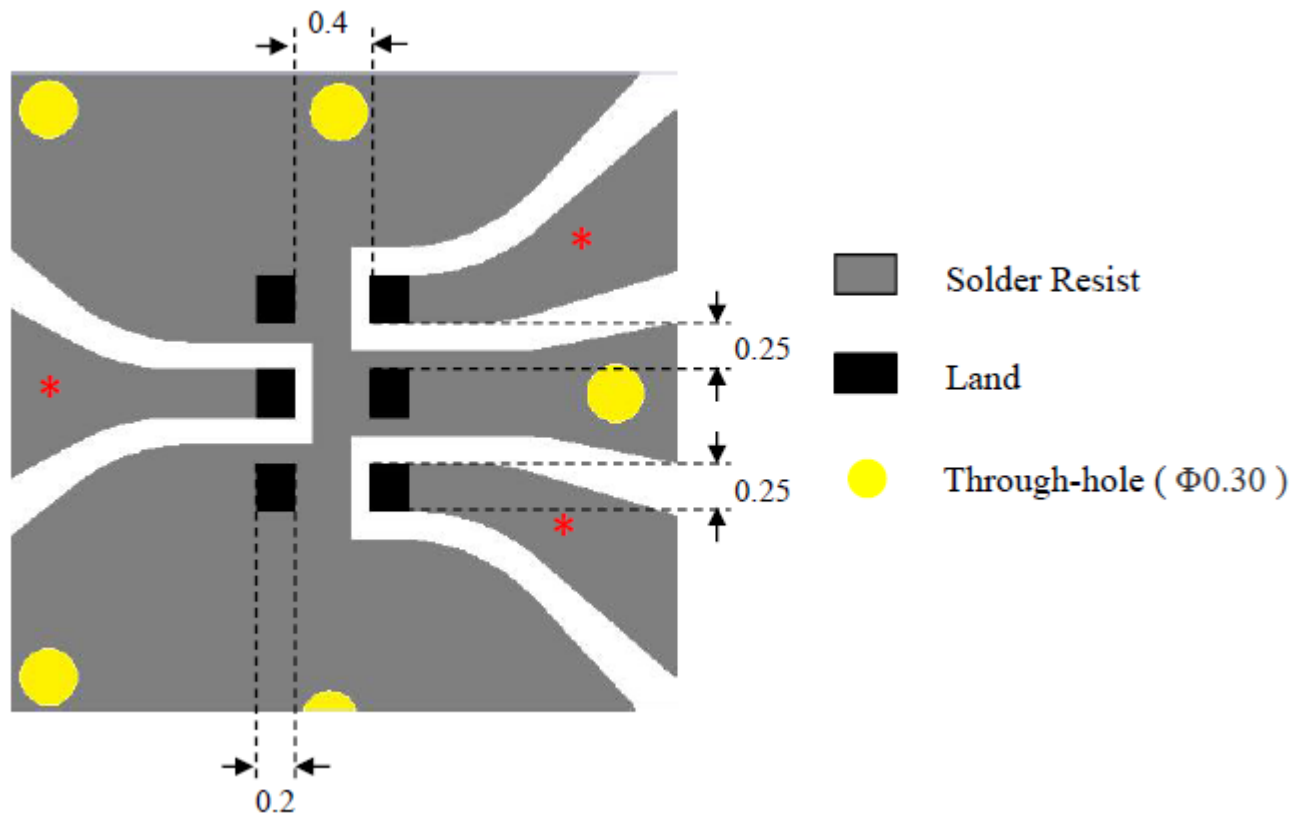
# Frequency Characteristics



# Frequency Characteristics



## PCB Footprint



Unit: mm

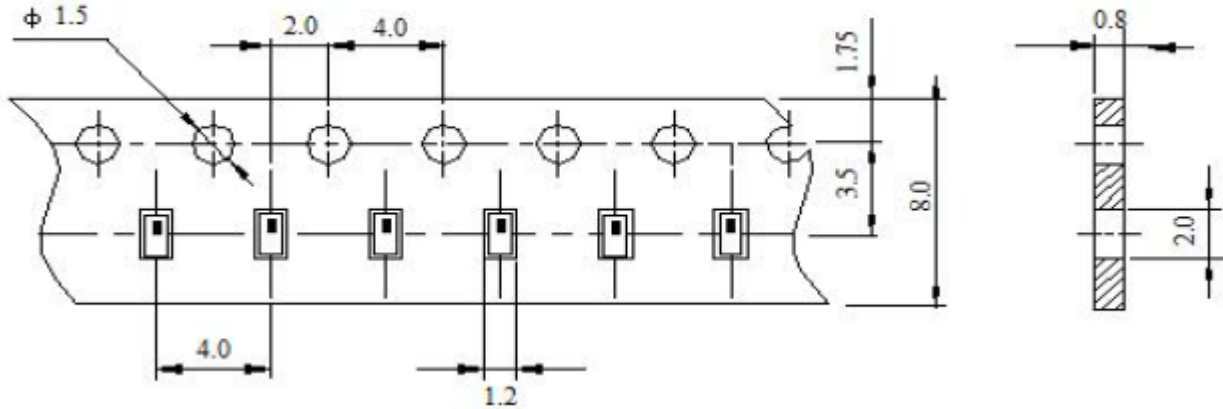
Line width should be designed to match  $50\Omega$  characteristic impedance, depending on PCB material and thickness.

# Packing

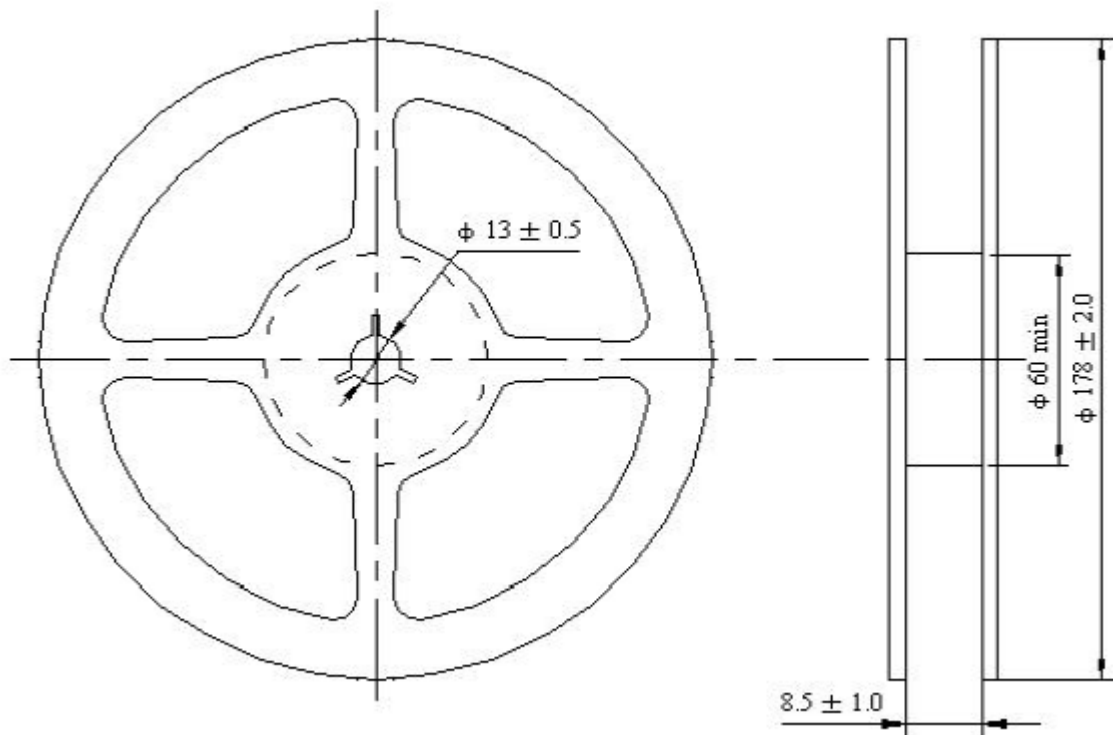
Reel Count:  
7" = 2000  
13" = 10,000

## Tape Dimension

Tape and Reel Standard per ANSI/EIA-481

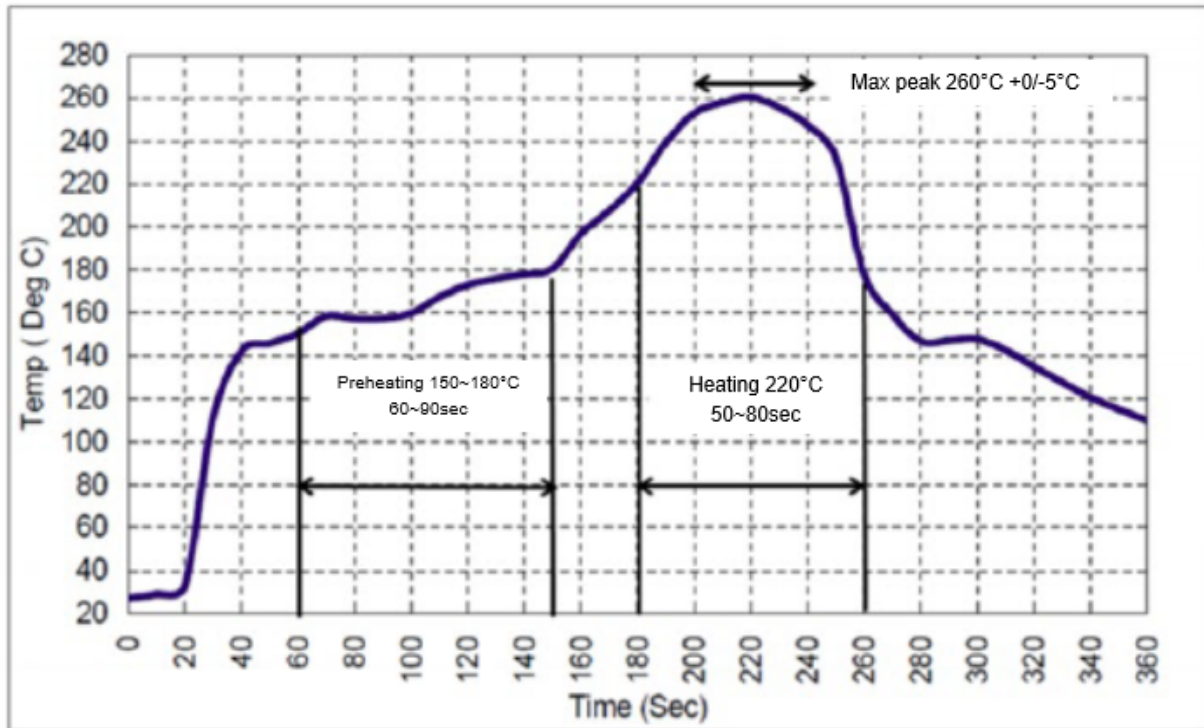


## Reel Dimension



## Recommended Reflow Profile

1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C +0/-5°C peak (10 seconds).



**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

### NOTES:

1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. This component was always RoHS compliant from the first date of manufacture.