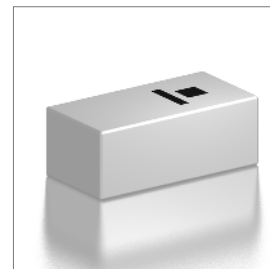


Features

- Miniature Footprint
- Low Insertion Loss
- High Attenuation on 2nd Harmonic Suppressed
- LTCC Process

Applications

- 2400~2500/4900~7150MHz Working Frequency
- WiFi Network



Part Numbering Guide

S R F D P - 1 G I I - W F B 9

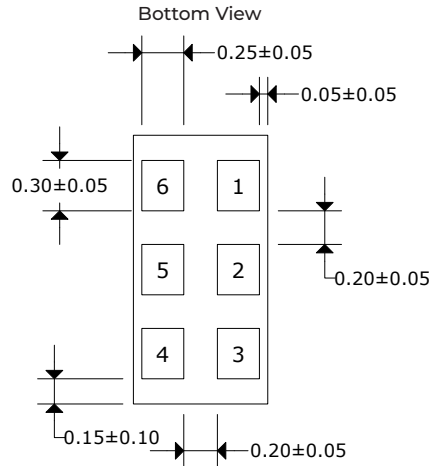
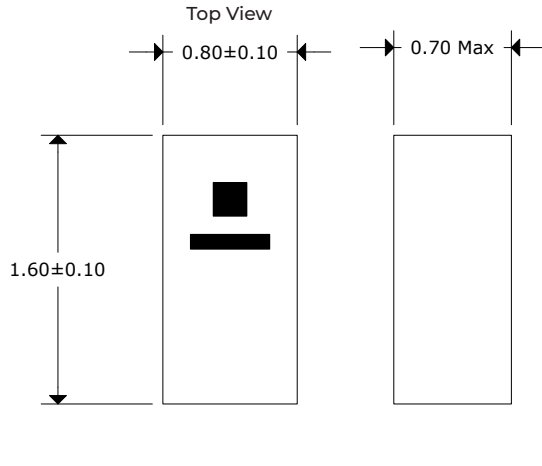


* Where letters denote decimal location (A=.0, B=.1, C=.2, etc.); e.g. B5=0.15, 3A5=3.05, 9A=9.0

Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency	MHz	2400		2500	
Insertion Loss @ 25°C	dB		0.6	0.8	
Insertion Loss @ -40°~85°C	dB			1.0	
Attenuation @ 4800~5000MHz	dB	45	50		
Attenuation @ 7200~7500MHz	dB	20	30		
Frequency	MHz	4900		5100	
Insertion Loss @ 25°C	dB		1.0	1.3	
Insertion Loss @ -40°~85°C	dB			1.5	
Attenuation @ 2400~2500MHz	dB	40	50		
Attenuation @ 10300~14300MHz	dB	22	25		
Attenuation @ 15300~21450MHz	dB	15	20		
Frequency	MHz	5150		7150	
Insertion Loss @ 25°C	dB		0.85	1.0	
Insertion Loss @ -40°~85°C	dB			1.2	
Attenuation @ 2400~2500MHz	dB	40	50		
Attenuation @ 10300~14300MHz	dB	22	25		
Attenuation @ 15300~21450MHz	dB	15	20		
VSWR				2.0	
Impedance	Ω		50		
Power Capacity	W			3	
Operating Temperature Range	°C	-40		85	
Storage Temperature Range	°C	-40		85	
Isolation @ 2400~2500MHz	dB	40	50		
Isolation @ 4800~5000MHz	dB	40	50		
Isolation @ 5000~6000MHz	dB	40	45		
Isolation @ 6000~7150MHz	dB	30	35		

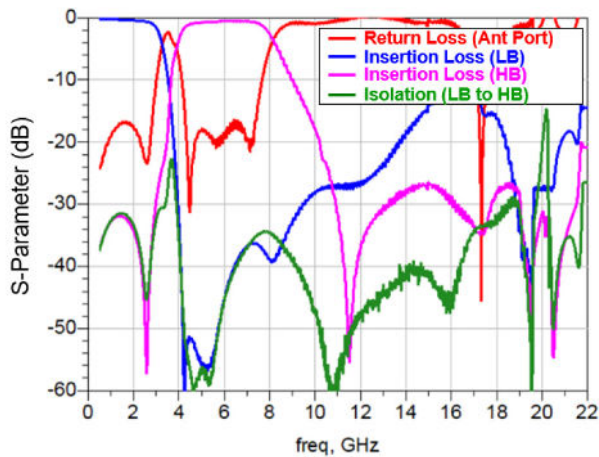
Outline Drawing

All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.



PIN	FUNCTION
1	GND
2	COMMON
3	GND
4	HIGH BAND
5	GND
6	LOW BAND

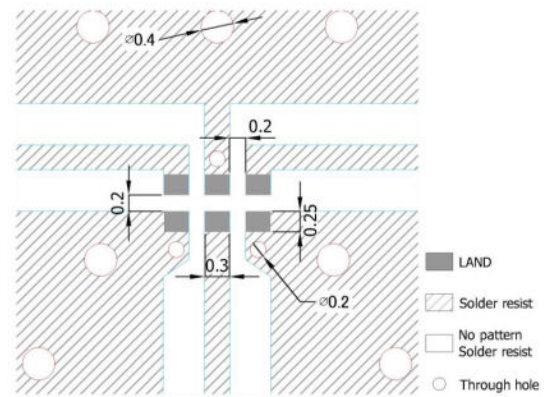
Typical Electrical Chart



Land Pattern

All dimensions are in millimeters (mm) unless otherwise noted.

Drawings are not to scale.

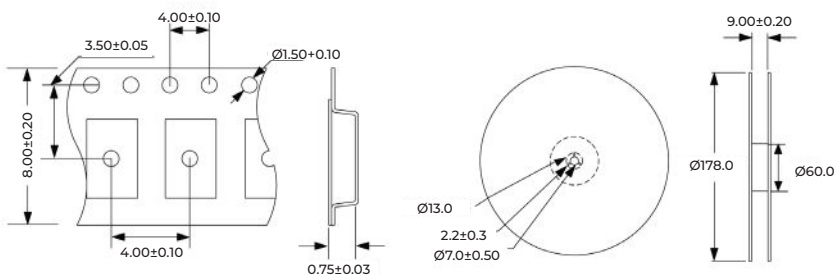


Line width to be designed to match 50Ω characteristic impedance, depending on PCB material and thickness.

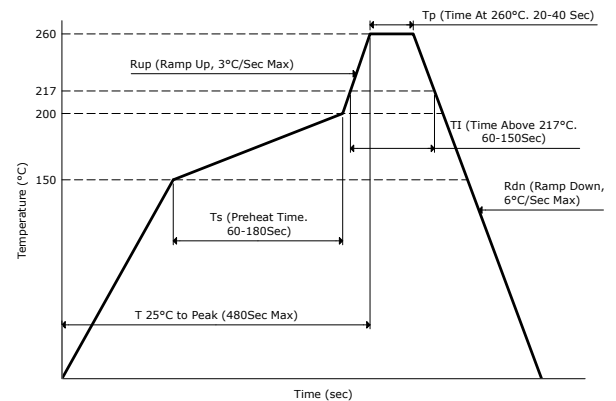
Tape and Reel Dimensions

All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.

4,000 pcs/reel



Reflow Profile



Reliability Test		
Test Item	Test Conditions/Test Method	Specification
Solderability JIS C 0050-4.6 JESD22-B102D	*Solder bath temperature : 235±5°C *Immersion time : 2±0.5 sec Solder : Sn3Ag0.5Cu for lead-free	At least 95% of a surface of each terminal electrode must be covered by fresh solder.
Leaching (Resistance to dissolution of metallization) IEC 60068-2-58	*Solder bath temperature : 260±5°C *Leaching immersion time : 30±0.5 sec Solder : SN63A	Loss of metallization on the edges of each electrode shall not exceed 25%
Resistance to soldering heat JIS C 0050-5.4	*Preheating temperature : 120~150°C, 1 minute *Solder temperature : 270±5°C *Immersion time : 10±1 sec Solder : Sn3Ag 0.5Cu for lead-free Measurement to be made after keeping at room temperature for 24±2 hrs.	No mechanical damage. Electrical specification shall satisfy the descriptions in electrical characteristics under the operational temperature range within -40~85°C. Loss of metallization on the edges of each electrode shall not exceed 25%
Drop Test JIS C 0044	*Height : 75 cm *Test surface : Rigid surface of concrete or steel. *Times : 6 surfaces for each unit; 2 times each side.	No mechanical damage. Electrical specification shall satisfy the description in electrical characteristics under the operational temperature range within -40~85°C.
Vibration JIS C 0040	*Frequency : 10Hz~55Hz~10Hz (1 min) *Total amplitude : 1.5mm *Test times : 6hrs (two hrs each in three mutually perpendicular directions)	No mechanical damage. Electrical specification shall satisfy the descriptions in electrical characteristics under the operational temperature range within -40~85°C.
Adhesive Strength of Termination JIS C 0051-7.4.3	*Pressurizing force : 5N(≤603) ; 10N(>0603) *Test time : 10±1 sec	No remarkable damage or removal of the termination
Bending Test JIS C 0051-7.4.1	The middle part of substrate shall be pressurized by means of the pressurizing rod at a rate of about 1mm/s per second until the deflection becomes 1mm/s and then pressure shall be maintained for 5±1 sec. Measurement to be made after keeping at room temperature for 24±2 hours.	No mechanical damage. Electrical specification shall satisfy the descriptions in electrical characteristics under the operational temperature range within -40~85°C.
Temperature Cycle JIS C 0025	1. 30±3 minutes at -40°C±3°C 2. 10~15 minutes at room temperature 3. 30±3 minutes at 85°C±3°C 4. 10~15 minutes at room temperature Total 100 continuous cycles Measurement to be made after keeping at room temperature for 24±2 hours.	No mechanical damage. Electrical specification shall satisfy the descriptions in electrical characteristics under the operational temperature range within -40~85°C.
High Temperature JIS C 0021	*Temperature : 85°C±2°C *Test duration : 1000+24/-0 hours Measurement to be made after keeping at room temperature for 24±2 hours.	No mechanical damage. Electrical specification shall satisfy the descriptions in electrical characteristics under the operational temperature range within -40~85°C.
Humidity (steady conditions) JIS C 0022	*Humidity : 90% to 95% Relative Humidity *Temperature : 40°C±2°C *Time : 1000+24/-0 hours Measurement to be made after keeping at room temperature for 24±2 hours. **500hrs measuring the first data then 1000hrs data	No mechanical damage. Electrical specification shall satisfy the descriptions in electrical characteristics under the operational temperature range within -40~85°C.
Low Temperature JIS C 0020	*Temperature : -40°C±2°C *Test duration : 1000+24/-0 hours Measurement to be made after keeping at room temperature for 24±2 hours.	No mechanical damage. Electrical specification shall satisfy the descriptions in electrical characteristics under the operational temperature range within -40~85°C.