Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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Thin-film Diplexer

For W-LAN

TFSD Series

Type: **TFSD10055950-5001C1**

Issue date: June 2017

⚠ Caution

The products in this catalog will be or have been stopped production

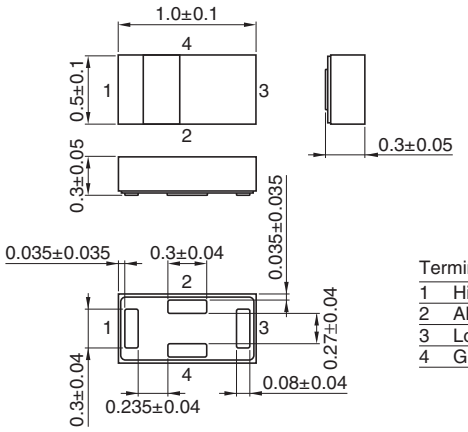
- All specifications are subject to change without notice.
- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

Thin-film Diplexer
For W-LAN

Conformity to RoHS Directive

TFSD Series TFSD10055950-5001C1

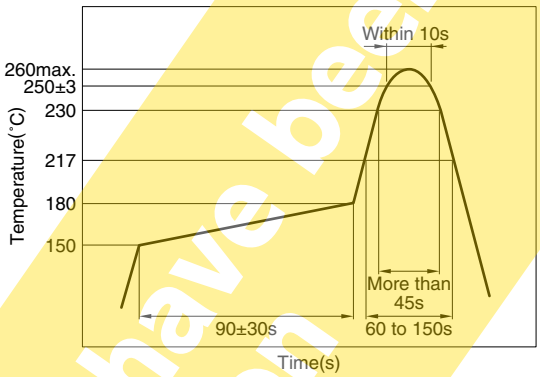
SHAPES AND DIMENSIONS



Terminal functions	
1	High-band
2	ANTENNA
3	Low-band
4	GND

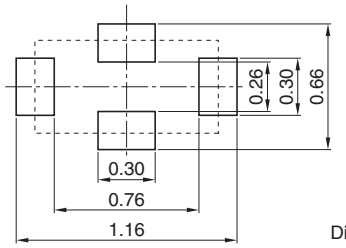
Dimensions in mm

RECOMMENDED REFLOW SOLDERIG CONDITION



* In this product, the recommended soldering condition is 'reflow'.
Reflow Soldering : Maximum 2 times

RECOMMENDED PC BOARD PATTERNS



Dimensions in mm

The recommended distance to the PCB ground plane is 0.2mm.
Line width be designed to mach 50Ω characteristic impedance depending on PCB Material and thickness.

ELECTRICAL CHARACTERISTICS

Item	Port	Frequency range		Minimum value	Typical value	Maximum value
Insertion loss	Low-band	2400 to 2500MHz	(dB)	—	0.43	0.5
	High-band	4900 to 5950MHz	(dB)	—	0.49	0.65
Return loss	ANT	2400 to 2500MHz	(dB)	10	19.5	—
	ANT	4900 to 5950MHz	(dB)	10	20.4	—
	Low-band	2400 to 2500MHz	(dB)	10	21.4	—
	High-band	4900 to 5950MHz	(dB)	10	22.5	—
Attenuation	Low-band	4800 to 5000MHz	(dB)	20	23.1	—
	Low-band	7200 to 7500MHz	(dB)	20	29.2	—
	High-band	824 to 915MHz	(dB)	20	25.6	—
	High-band	1800 to 2500MHz	(dB)	20	24.1	—
	High-band	9800 to 11900MHz	(dB)	18	21.0	—
Isolation	High-band	DC to 2500MHz	(dB)	20	23.4	—
	High-band	4900 to 5950MHz	(dB)	20	23.9	—
Temperature range		Operating	(°C)	–40	—	+85
		Storage	(°C)	–40	—	+85

• Ta: +25°C

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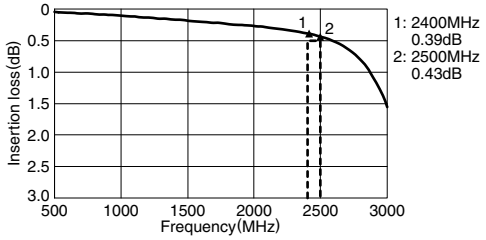
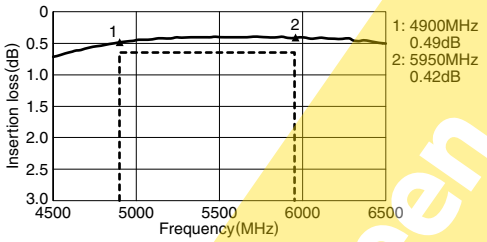
FREQUENCY CHARACTERISTICS

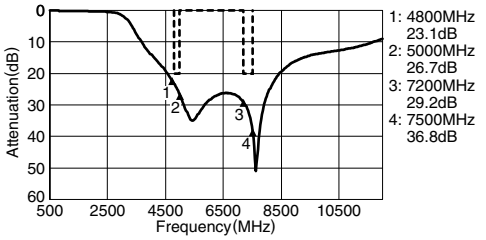
Low-BAND PORT INSERTION LOSS



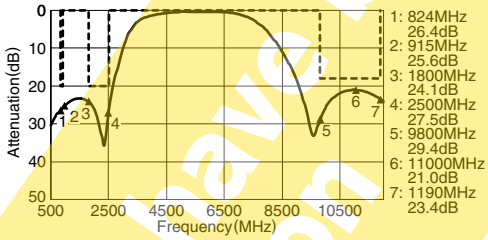
High-BAND PORT INSERTION LOSS



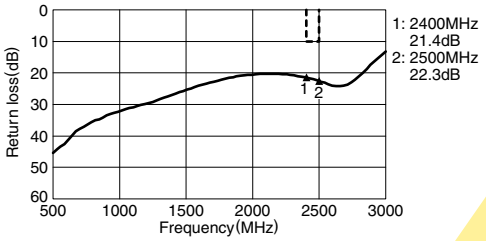
Low-BAND PORT ATTENUATION



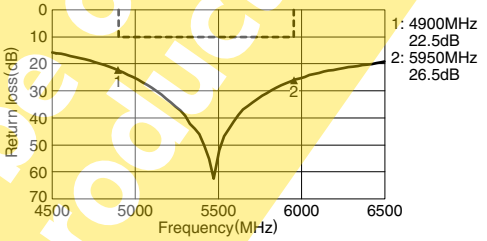
High-BAND PORT ATTENUATION



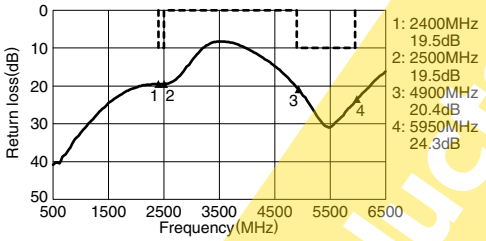
Low-BAND PORT RETURN LOSS



High-BAND PORT RETURN LOSS



ANTENNA PORT RETURN LOSS



ISOLATION (Low-High)