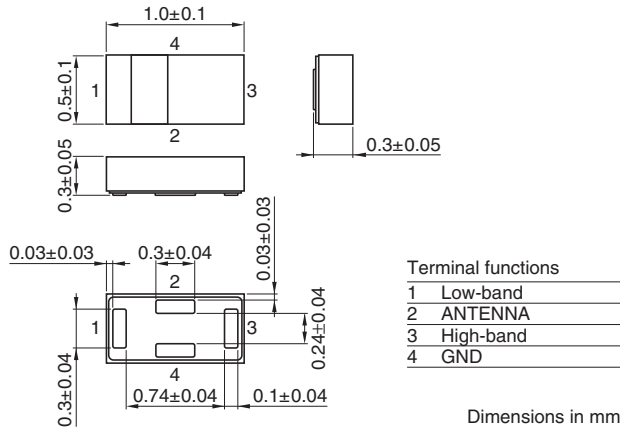


Thin-film Diplexer For W-LAN

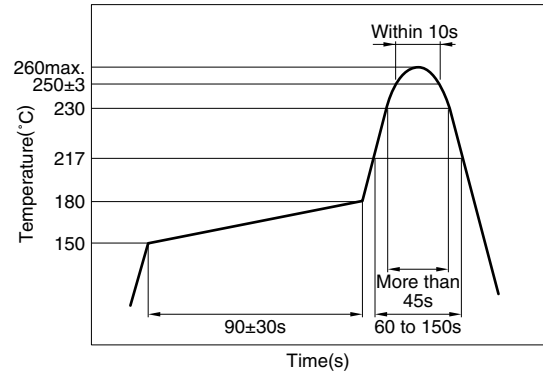
Conformity to RoHS Directive

TFSD Series TFSD10055950-5102A2

SHAPES AND DIMENSIONS

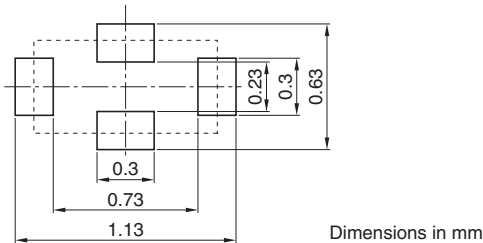


RECOMMENDED REFLOW SOLDERING CONDITION



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

RECOMMENDED PC BOARD PATTERNS



The recommended distance to the PCB ground plane is 0.2mm.
Line width be designed to match 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*1	2400 to 2496MHz	(dB)	—	0.35	0.5
	High-band*1	4900 to 5950MHz	(dB)	—	0.74	0.12
	Low-band*2	2400 to 2496MHz	(dB)	—	—	0.65
	High-band*2	4900 to 5950MHz	(dB)	—	—	1.4
Return loss	ANT	2400 to 2500MHz	(dB)	10	21.2	—
	ANT	4900 to 5950MHz	(dB)	10	15.2	—
	Low-band	2400 to 2500MHz	(dB)	10	18.0	—
	High-band	4900 to 5950MHz	(dB)	10	14.8	—
Attenuation	Low-band	4900 to 5950MHz	(dB)	20	24.6	—
	Low-band	7200 to 7488MHz	(dB)	20	27.3	—
	High-band	500 to 2700MHz	(dB)	26	30.8	—
	High-band	9800 to 11900MHz	(dB)	15	20.5	—
Isolation		500 to 2700MHz	(dB)	26	30.8	—
		4900 to 5950MHz	(dB)	20	24.2	—
Temperature range	Operating		(°C)	−40	—	+85
	Storage		(°C)	−40	—	+85

*1 +25°C

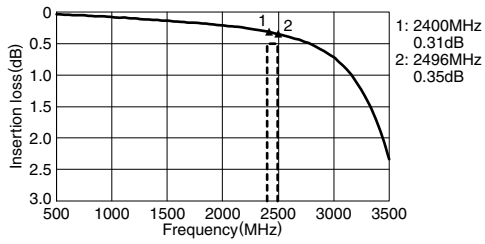
*2 −40 to +85°C

• 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.

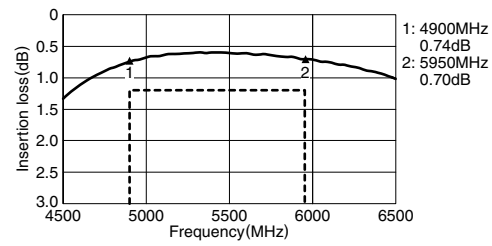
• All specifications are subject to change without notice.

FREQUENCY CHARACTERISTICS

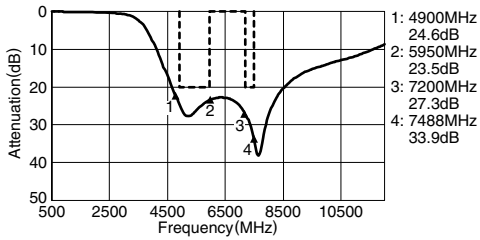
Low-BAND PORT INSERTION LOSS



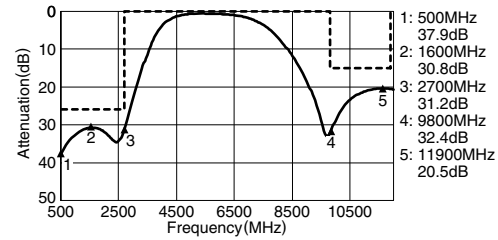
High-BAND PORT INSERTION LOSS



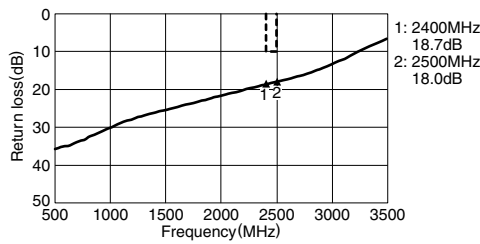
Low-BAND PORT ATTENUATION



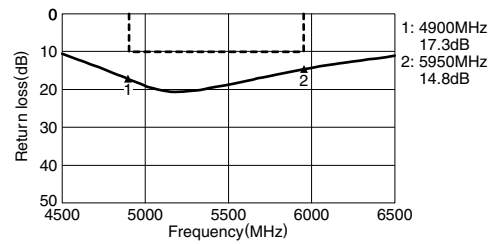
High-BAND PORT ATTENUATION



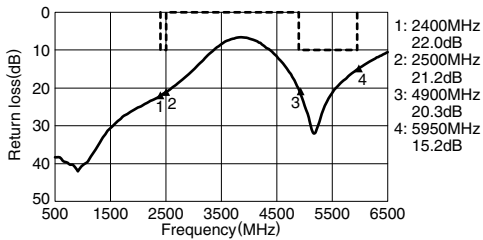
Low-BAND PORT RETURN LOSS



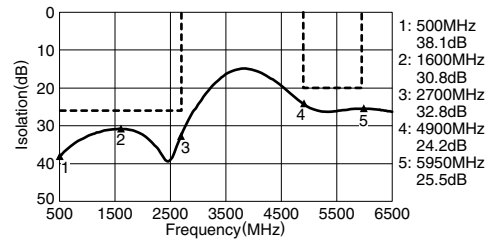
High-BAND PORT RETURN LOSS



ANTENNA PORT RETURN LOSS



ISOLATION (Low-High)



Mouser Electronics

Authorized Distributor

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TDK:

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