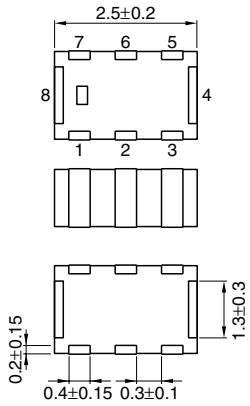
TDK

Multilayer Chip Band Pass Filters(Balance Output Type) For Bluetooth & 2.4GHz W-LAN

Conformity to RoHS Directive

DEA Series DEA252450BT-7012D1

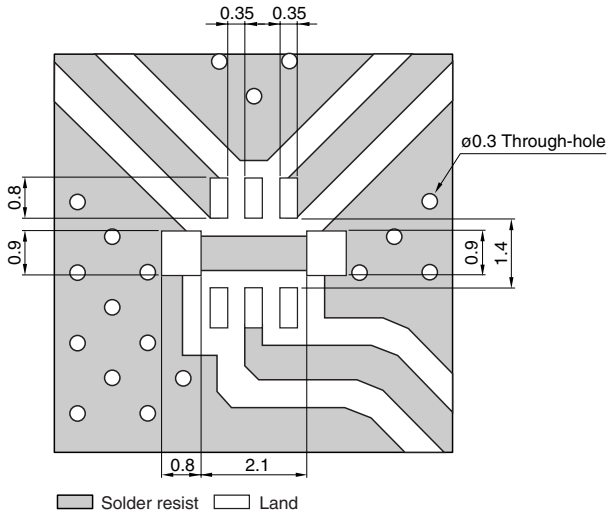
SHAPES AND DIMENSIONS



Terminal functions	
1	N.C.
2	Unbalanced
3	DC feed or N.C.
4	GND
5	Balanced
6	N.C.
7	Balanced
8	GND

Dimensions in mm

RECOMMENDED PC BOARD PATTERNS



Line width be designed to mach 50Ω characteristic impedance depending on PCB material and thickness

Dimensions in mm

ELECTRICAL CHARACTERISTICS

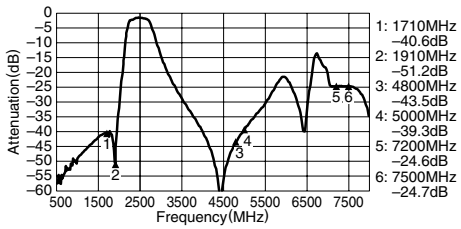
Item			Typical value
Frequency range (Pass band)		2400 to 2500MHz	—
Unbalanced impedance		50Ω(Nominal)	—
Balanced impedance		100Ω(Nominal)	—
Insertion loss	[+25°C]	1.9dB max.	1.5dB
	[–40 to +85°C]	2.2dB max.	—
Attenuation	[880 to 960MHz]	40dB min.	50dB
	[1710 to 1910MHz]	32dB min.	42dB
	[4800 to 5000MHz]	30dB min.	40dB
Unbalanced port return loss		10dB min.	14dB
Phase difference at balanced port		180±12deg	188deg
Amplitude imbalance at balanced port		0±1.0dB	0dB
Temperature range	Operating	–40 to +85°C	
	Storage	–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.

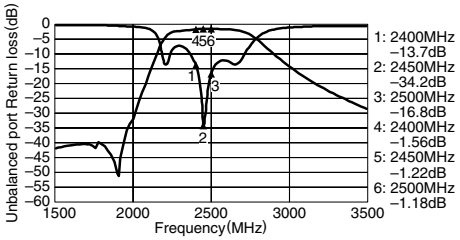
FREQUENCY CHARACTERISTICS

Unbalance 50Ω/Balance 100Ω

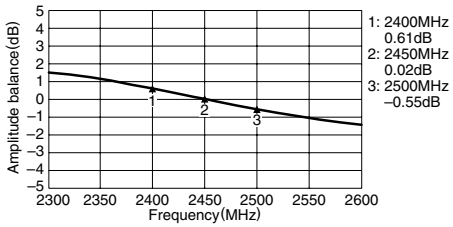
ATTENUATION



UNBALANCED PORT RETURN LOSS



AMPLITUDE BALANCE



PHASE BALANCE