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

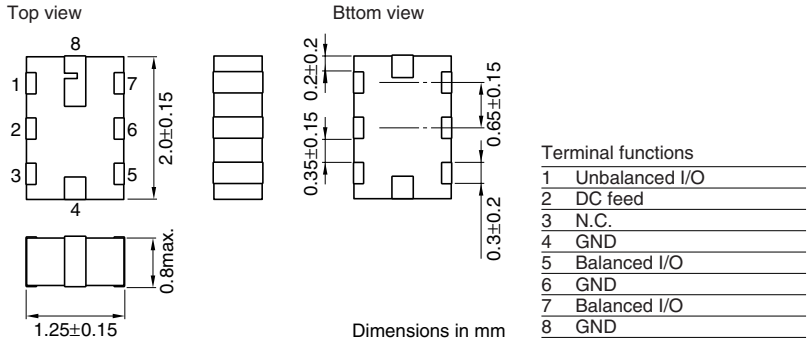
Conformity to RoHS Directive

DEA Series DEA202450BT-7099A1

FEATURES

- Miniature balanced band pass filter.
- Matched to 24+j48.8Ω.
- Package size: 2.0×1.25mm.
- Low profile : 0.8mm max. height.

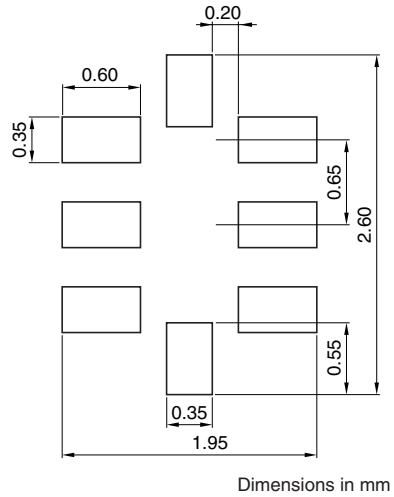
SHAPES AND DIMENSIONS



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

The identification marking in figure refer to prototype components only.
A different component mark is used for mass production.

RECOMMENDED PC BOARD PATTERNS



- Pin 2 of the filter provides a DC feed connection to the balanced ports.
- In the event that this function is used pin 2 should be connected to ground using a de-coupling capacitor.

- 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.

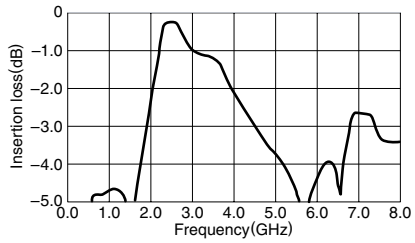
ELECTRICAL CHARACTERISTICS

Insertion Loss	[2402 to 2480MHz]	2.3dB typ.
Single ended port characteristic impedance	—	50Ω(Nominal)
Balanced ports impedance, nominal value	—	24 + j48.8Ω
Return loss: Unbalanced port	[2402 to 2480MHz]	11.9dB typ.
Return loss: Balanced port (with respect to nominal balanced impedance)		11dB typ.
Attenuation	[880 to 960MHz]	47dB typ.
	[1710 to 1880MHz]	29dB typ.
	[1880 to 1910MHz]	27dB typ.
	[2110 to 2170MHz]	10dB typ.
	[4804 to 4960MHz]	36dB typ.
Phase difference at balanced port	[2402 to 2480MHz]	176deg typ.
Amplitude imbalance at balanced port	[2402 to 2480MHz]	0.9dB typ.
Temperature range	Operating	–40 to +85°C
	Storage	–40 to +85°C

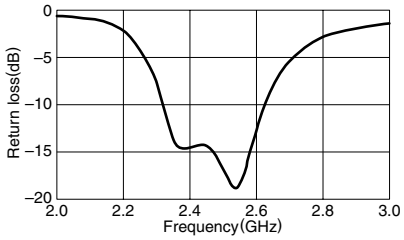
FREQUENCY CHARACTERISTICS

Unbalance 50Ω/Balance 200Ω

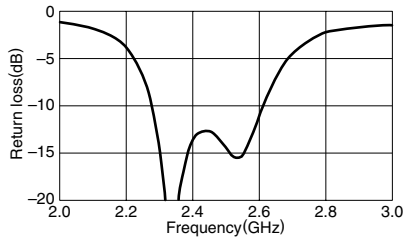
INSERTION LOSS/ATTENUATION



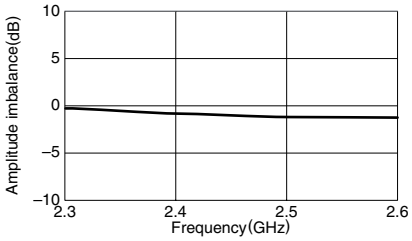
RETURN LOSS(Unbalance)



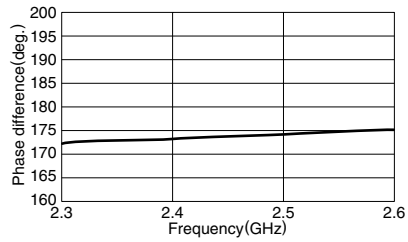
RETURN LOSS(Balance)



AMPLITUDE IMBALANCE



PHASE DIFFERENCE



COMMON MODE