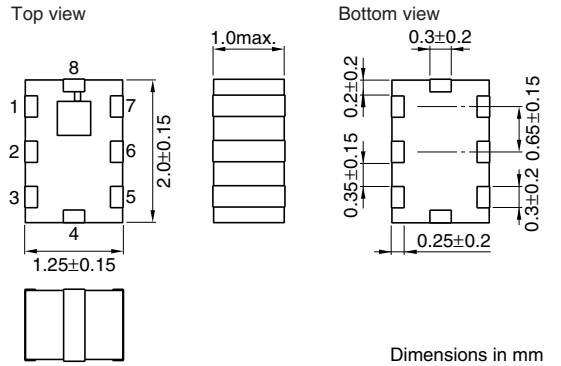
Multilayer Chip Band Pass Filters(Balance Output Type) For Bluetooth & 2.4GHz W-LAN

Conformity to RoHS Directive

DEA Series DEA202450BT-7089C3

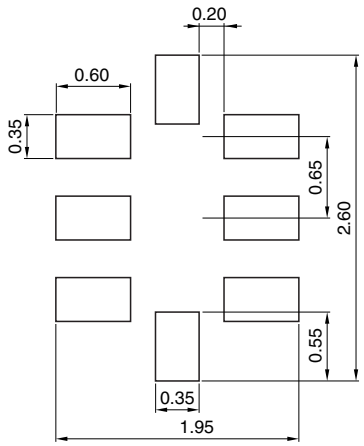
SHAPES AND DIMENSIONS



Dimensions in mm

Terminal functions	
1	Unbalanced port
2	NC
3	NC
4	GND
5	Balanced port
6	GND
7	Balanced port
8	GND

RECOMMENDED PC BOARD PATTERNS



Dimensions in mm

ELECTRICAL CHARACTERISTICS

Item			Typical value
Frequency range(Pass band)		2400 to 2500MHz	
Insertion loss	[+25°C]	3.4dB max.	2.95dB
	[–40 to +85°C]	3.7dB max.	—
Single ended port characteristic impedance		50Ω (Nominal)	—
Balanced port differential characteristics impedance		55+j50Ω (Nominal)	—
Attenuation	[10 to 915MHz]	40dB min.	46dB
	[925 to 960MHz]	39dB min.	45dB
	[1570 to 1580MHz]	30dB min.	44dB
	[1710 to 1785MHz]	39dB min.	47dB
	[1805 to 1880MHz]	25dB min.	55dB
	[1850 to 1910MHz]	38dB min.	51dB
	[1920 to 1990MHz]	33dB min.	48dB
	[2112 to 2168MHz]	20dB min.	31dB
	[4800 to 5000MHz]	26dB min.	38dB
	[7200 to 7500MHz]	26dB min.	35dB
Single ended return loss	[2400 to 2500MHz]	8.5dB min.	13dB
Balanced return loss	[2400 to 2500MHz]	8.5dB min.	14dB
Phase difference at balanced port	[2400 to 2500MHz]	180±10deg.	183deg.
Amplitude imbalance at balanced port	[2400 to 2500MHz]	0±2.0dB	–0.5dB
Temperature range	Operating	–40 to +85°C	
	Storage	–40 to +85°C	

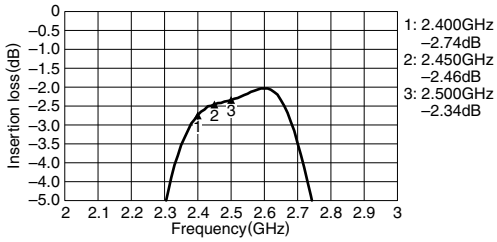
• Ta:+25°C

• 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.

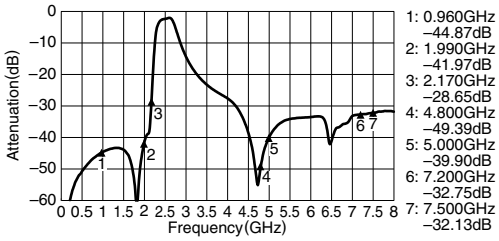
FREQUENCY CHARACTERISTICS

Unbalance 50Ω/Balance 55+j50Ω

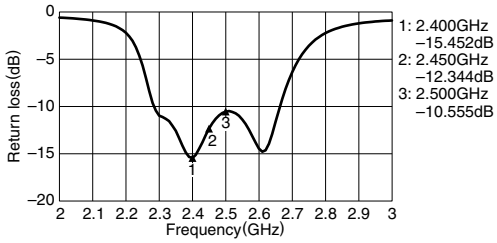
SDS21 INSERTION LOSS



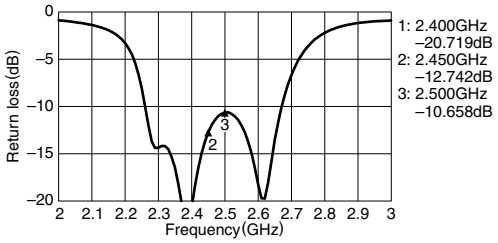
SDS21 ATTENUATION



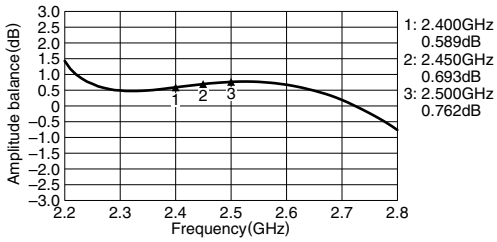
S11 UNBALANCE RETURN LOSS



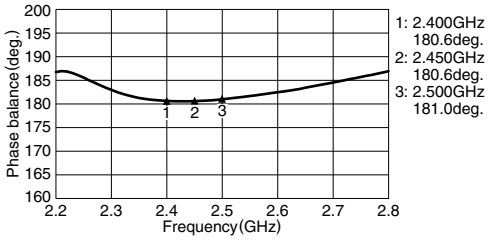
SDD22 BALANCE RETURN LOSS



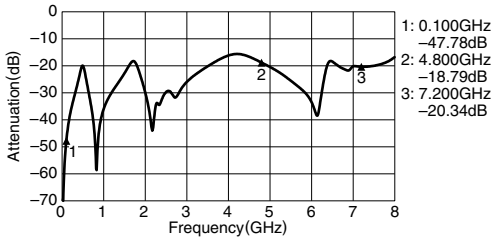
AMPLITUDE BALANCE



PHASE BALANCE

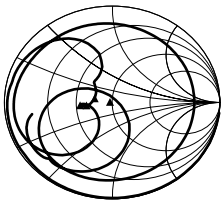


SCS21 CMRR



SMITH CHARTS

S11



SDD22