⚠The products in this catalog are not recommended for new design

RF Components

June 2015

Multilayer Band Pass Filter

For 2400-2500MHz

DEA252450BT-2080B2

2.5x2.0mm [EIA 1008]*

* Dimensions Code JIS[EIA]

⚠The products in this catalog are not recommended for new design

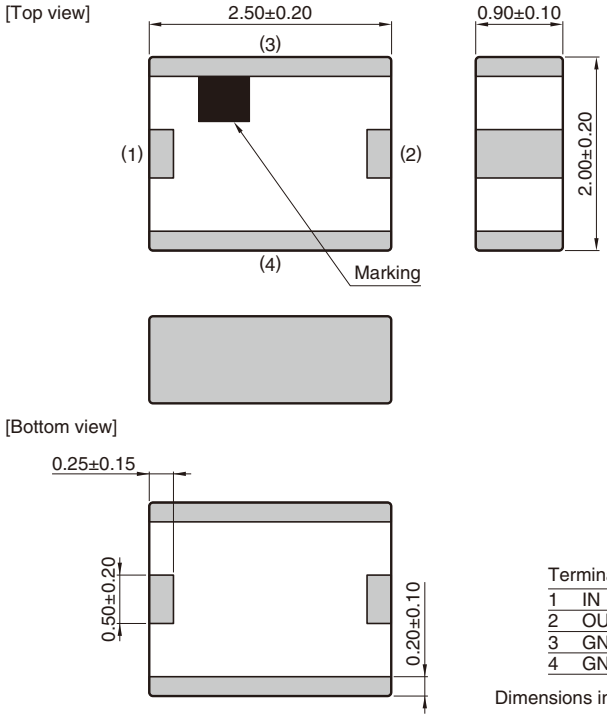
Multilayer Band Pass Filter

Conformity to RoHS Directive

For 2400-2500MHz

DEA252450BT-2080B2

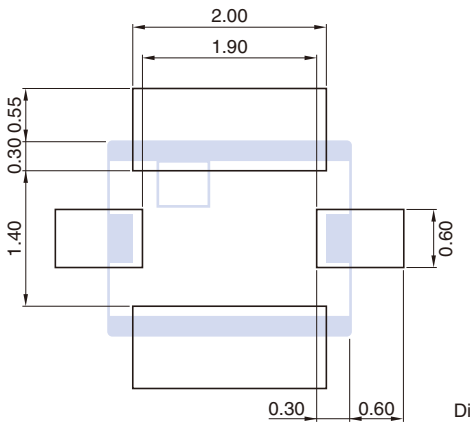
SHAPES AND DIMENSIONS



Terminal functions	
1	IN
2	OUT
3	GND
4	GND

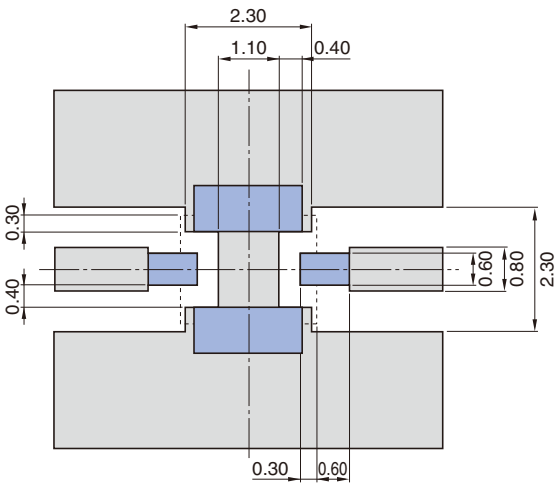
Dimensions in mm

RECOMMENDED LAND PATTERN



Dimensions in mm

EVALUATION BOARD



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

Dimensions in mm

○RoHS Directive Compliant Product: See the following for more details related to RoHS Directive compliant products. http://product.tdk.com/en/environment/rohs/

• All specifications are subject to change without notice.
• Before using these products, be sure to request the delivery specifications.

DEA252450BT-2080B2

ELECTRICAL CHARACTERISTICS

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Insertion Loss (dB)	2400 to 2500	—	1.56	2.0
Return Loss (dB)	2400 to 2500	10	24.4	—
Attenuation (dB)	824 to 849	52	54.8	—
	869 to 894	52	54.8	—
	894 to 915	52	54.1	—
	925 to 960	52	54.1	—
	1570 to 1580	54	58.2	—
	1710 to 1785	54	68.0	—
	1805 to 1850	54	69.2	—
	1850 to 1910	54	68.4	—
	1930 to 1990	48	51.7	—
	2100	25	32.8	—
	4800 to 5000	40	52.1	—
	7200 to 7500	21	32.7	—
Characteristic Impedance (Ω)			50 (Nominal)	

・Ta: +25±5°C

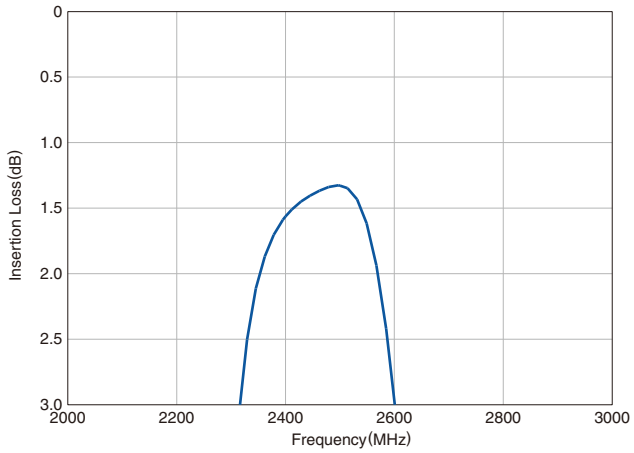
TEMPERATURE RANGE

Operating temperature (°C)	Storage temperature (°C)
–40 to +85	–40 to +85

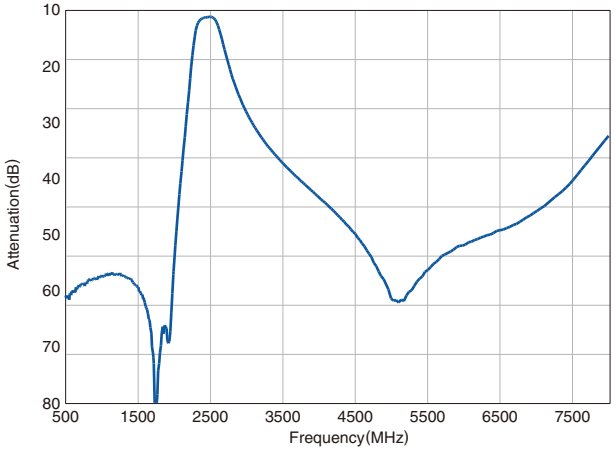
DEA252450BT-2080B2

■FREQUENCY CHARACTERISTICS

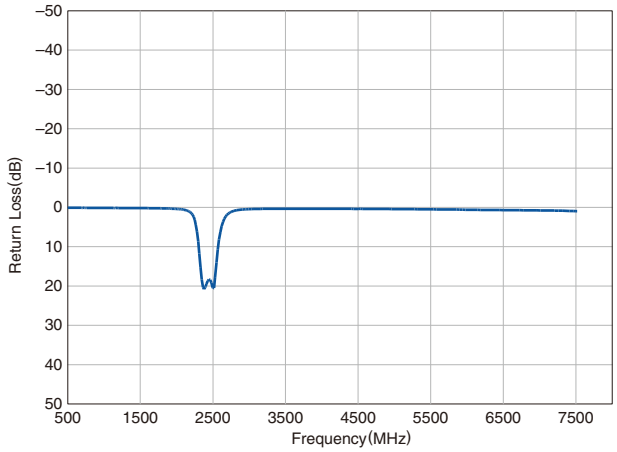
□INSERTION LOSS



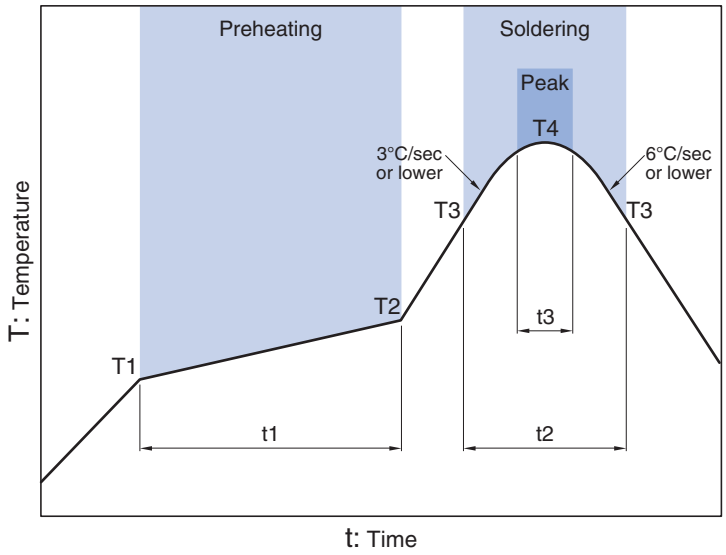
□ATTENUATION



□RETURN LOSS



RECOMMENDED REFLOW PROFILE



Preheating			Soldering			
			Critical zone (T3 to T4)		Peak	
Temp.		Time	Temp.	Time	Temp.	Time
T1	T2	t1	T3	t2	T4	t3*
150°C	200°C	60 to 120sec	217°C	60 to 120sec	240 to 260°C	30sec max.

* t3 : Time within 5°C of actual peak temperature
The maximum number of reflow is 3.

REMINDERS FOR USING THESE PRODUCTS

Before using these products, be sure to request the delivery specifications.

SAFETY REMINDERS

Please pay sufficient attention to the warnings for safe designing when using these products.

⚠ REMINDERS

The products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition.
The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property.
Please understand that we are not responsible for any damage or liability caused by use of the products in any of the applications below or for any other use exceeding the range or conditions set forth in this catalog.

(1) Aerospace/Aviation equipment
(2) Transportation equipment (cars, electric trains, ships, etc.)
(3) Medical equipment
(4) Power-generation control equipment
(5) Atomic energy-related equipment
(6) Seabed equipment
(7) Transportation control equipment
(8) Public information-processing equipment
(9) Military equipment
(10) Electric heating apparatus, burning equipment
(11) Disaster prevention/crime prevention equipment
(12) Safety equipment
(13) Other applications that are not considered general-purpose applications

When using this product in general-purpose applications, you are kindly requested to take into consideration securing protection circuit/equipment or providing backup circuits, etc., to ensure higher safety.