



Multilayer Low Pass Filter (2in1)

For 824-915MHz / 1710-1910MHz

DEA161910LT-9031A1

1.6x0.8mm [EIA 0603]*

* Dimensions Code JIS[EIA]

Caution

The products in this catalog will be or have been stopped production

Discontinue Issue Date	Jun. 4, 2020
Last Purchase Order Date	Dec. 31, 2021
Last Shipment Date	Mar. 31, 2022

Please refer to our Web site about replacement information.

Multilayer Low Pass Filter (2in1)

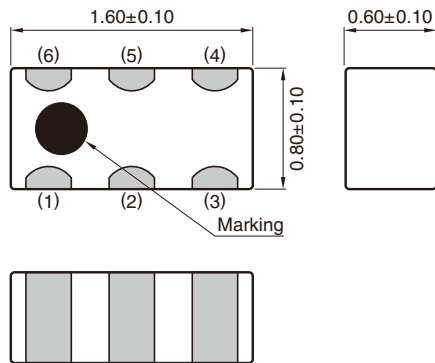
Conformity to RoHS Directive

For 824-915MHz / 1710-1910MHz

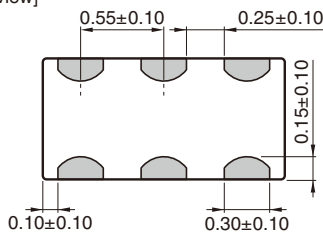
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SHAPES AND DIMENSIONS

[Top view]



[Bottom view]

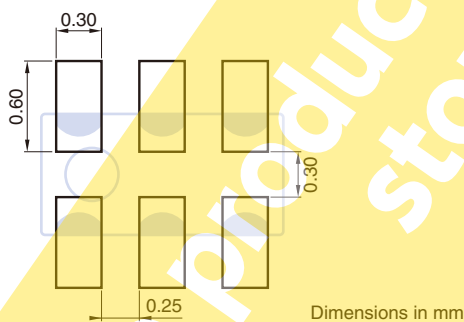


Terminal functions

- | | |
|---|-----------------------|
| 1 | High Band Input port |
| 2 | GND |
| 3 | Low Band Input port |
| 4 | Low Band Output port |
| 5 | GND |
| 6 | High Band Output port |

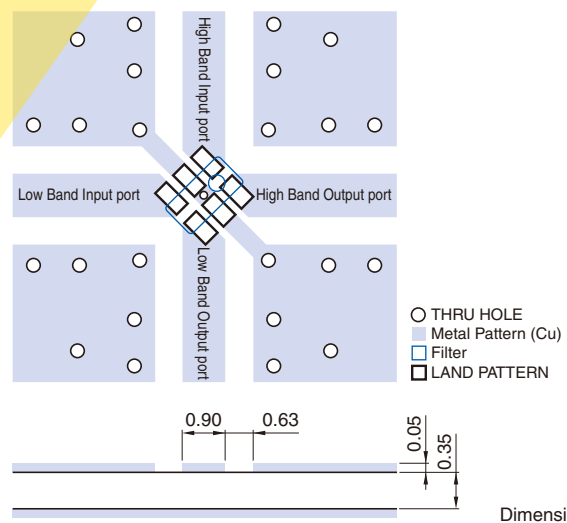
Dimensions in mm

RECOMMENDED LAND PATTERN



Dimensions in mm

EVALUATION BOARD



Dimensions in mm

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

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.

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ELECTRICAL CHARACTERISTICS

LOW-BAND

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Insertion Loss (dB)	824 to 915	—	0.47	0.60
	824 to 915	—	—	0.80 (−40 to +85°C)
Return Loss (dB)	824 to 915	10.03	29.2	—
	1648 to 1830	30	40.8	—
Attenuation (dB)	2472 to 2745	25	34.8	—
	3296 to 3660	20	28.3	—
	4120 to 4575	13	19.5	—
	4944 to 6405	7	15.0	—
	6500 to 12750	3	6.7	—
Characteristic Impedance (Ω)	50 (Nominal)			

· Ta: +25±5°C

HIGH-BAND

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Insertion Loss (dB)	1710 to 1910	—	0.43	0.60
	1710 to 1910	—	—	0.80 (−40 to +85°C)
Return Loss (dB)	1710 to 1910	10.03	17.0	—
	3420 to 3820	30	40.3	—
Attenuation (dB)	5130 to 5730	20	26.1	—
	6840 to 9550	7	12.0	—
	10260 to 12750	3	8.3	—
Characteristic Impedance (Ω)	50 (Nominal)			

· Ta: +25±5°C

TEMPERATURE RANGE

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

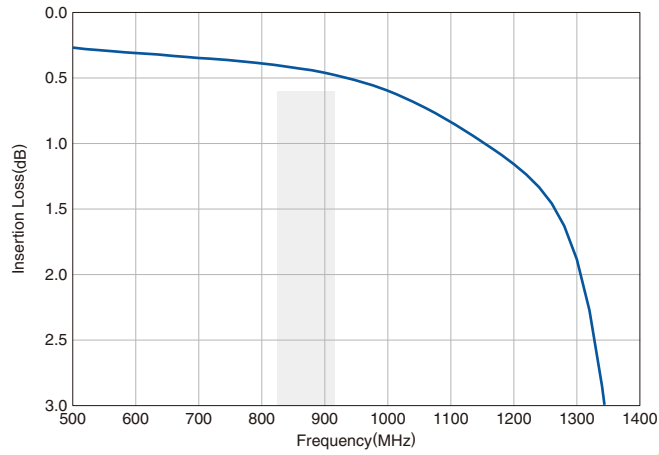
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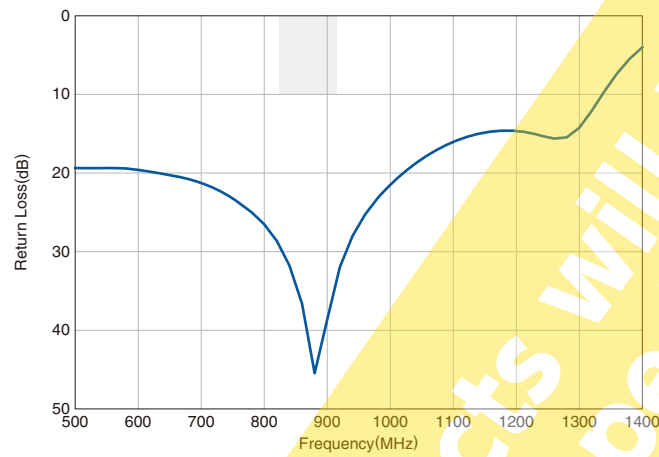
FREQUENCY CHARACTERISTICS

LOW-BAND

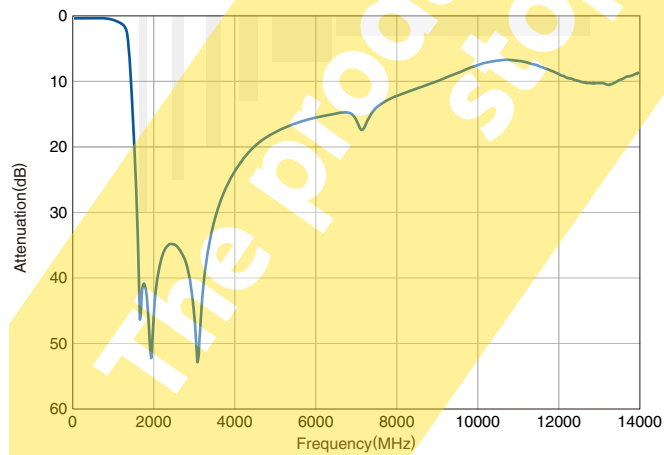
Insertion Loss



Return Loss

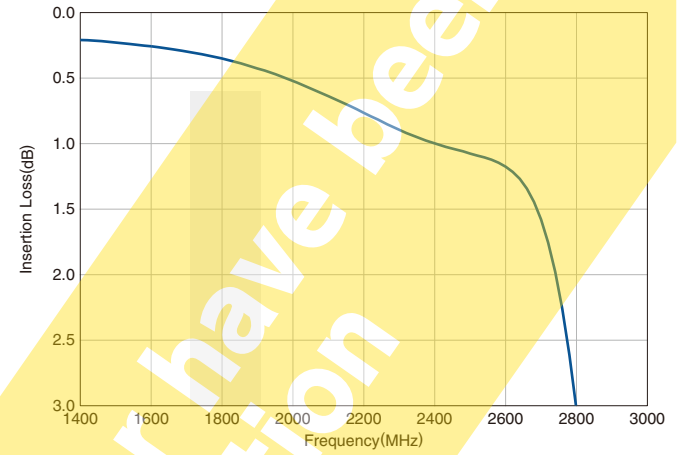


Attenuation

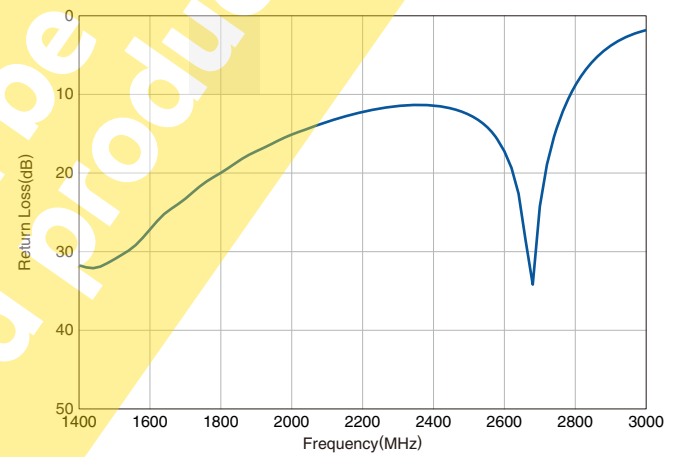


HIGH-BAND

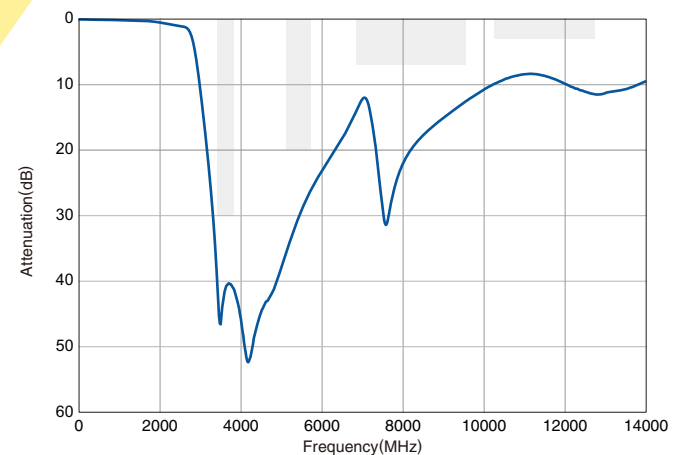
Insertion Loss



Return Loss



Attenuation



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RECOMMENDED REFLOW PROFILE



Preheating			Soldering			
			Critical zone (T3 to T4)		Peak	
Temp.	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.

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

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.