

January 2016

Multilayer Low Pass Filter (2in1)

For 824-915MHz / 1710-1910MHz

DEA161910LT-9031A1

- 1.6x0.8mm [EIA 0603]*
- * Dimensions Code JIS[EIA]



Multilayer Low Pass Filter (2in1)

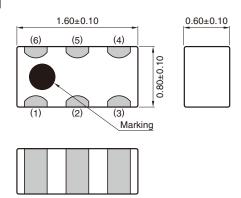
For 824-915MHz / 1710-1910MHz

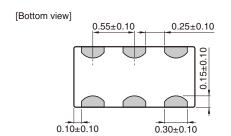
Conformity to RoHS Directive

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SHAPES AND DIMENSIONS

[Top view]

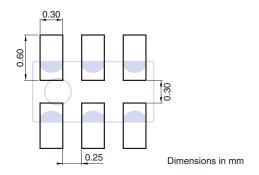




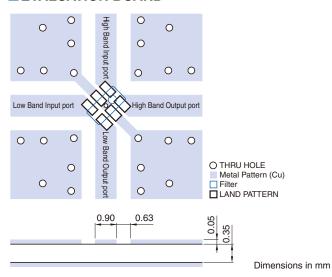
Terminal functions			
1	High Band Input port		
2	GND		
3	Low Band Input port		
4	Low Band Output port		
5	GND		
6	High Band Output port		

Dimensions in mm

■ RECOMMENDED LAND PATTERN



EVALUATION BOARD



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	Frequen (MHz)	cy Range	Min.	Тур.	Max.
Insertion Loss (dB)	824 to	915	_	0.47	0.60
Ilisertion Loss (db)	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	_
	2472 to	2745	25	34.8	_
Attanuation (dD)	3296 to	3660	20	28.3	_
Attenuation (dB)	4120 to	4575	13	19.5	_
	4944 to	6405	7	15.0	_
	6500 to 1	12750	3	6.7	_
Characteristic Impedance (Ω)				50 (Nominal)	

[·] Ta: +25±5°C

☐HIGH-BAND

Item	Frequency Range (MHz)	Min.	Тур.	Max.
Inscript Loop (dD)	1710 to 1910	_	0.43	0.60
Insertion Loss (dB)	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	_
Attanuation (dD)	5130 to 5730	20	26.1	_
Attenuation (dB)	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	Storage temperature		
(°C)	(°C)		
-40 to +85	-40 to +85		

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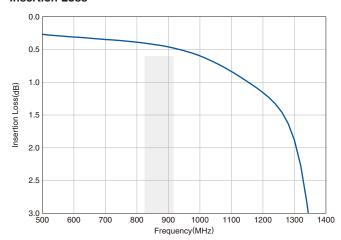


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FREQUENCY CHARACTERISTICS

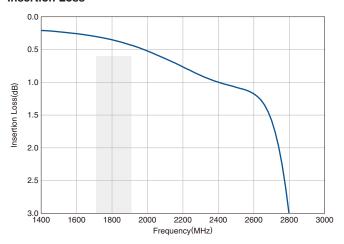
LOW-BAND

Insertion Loss

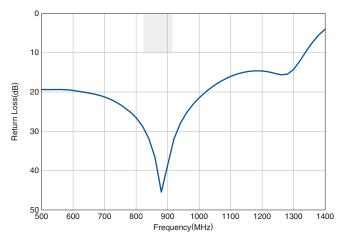


☐HIGH-BAND

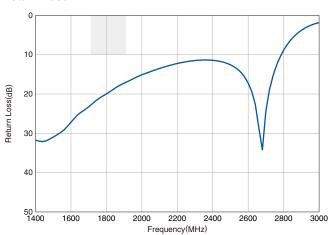
Insertion Loss



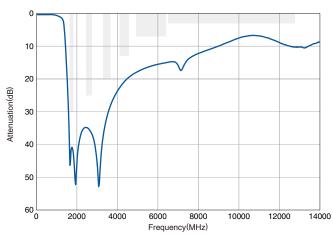
Return Loss



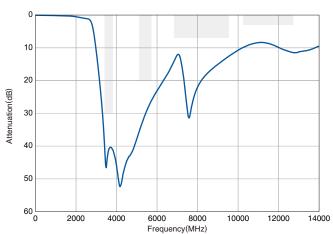
Return Loss



Attenuation



Attenuation



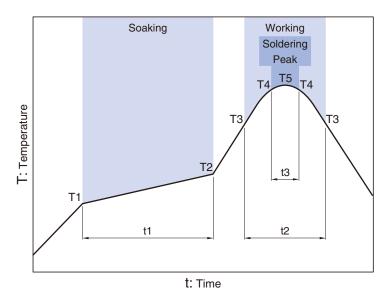
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■ RECOMMENDED REFLOW PROFILE



Soaking			Working		Soldering Peak	Soldering Peak	
Temp.		Time	Temp.	Time	Temp.	Time	Temp.
T1	T2	t1	Т3	t2	T4	t3	T5
150°C	180°C	60 to 120s	230°C	more than 30s	247 to 253°C	within 10s	260°C max.

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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
- (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.

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