

June 2015

## Multilayer Low Pass Filter

For 470-787MHz

# DEA160787LT-5032A1

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



## **Multilayer Low Pass Filter**

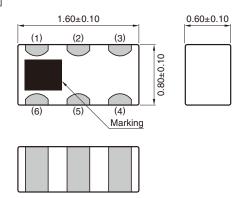
For 470-787MHz

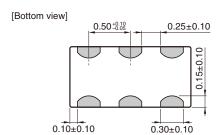
#### Conformity to RoHS Directive

## **DEA160787LT-5032A1**

#### **SHAPES AND DIMENSIONS**

[Top view]

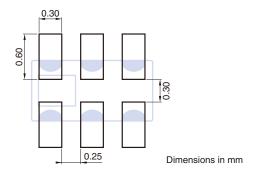




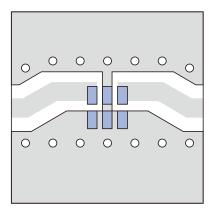
Terminal functions				
1	IN			
2	GND			
3	OUT			
4	GND			
5	N.C.			
6	GND			

Dimensions in mm

#### ■ RECOMMENDED LAND PATTERN



#### **EVALUATION BOARD**



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

OROHS 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.



## DEA160787LT-5032A1

#### **ELECTRICAL CHARACTERISTICS**

Item	Frequency Range (MHz)	Min.	Тур.	Max.
Insertion Loss (dD)	470 to 787	_	0.46	0.65
Insertion Loss (dB)	470 to 787	_	_	0.71(-40 to +85°C)
Return Loss (dB)	470 to 787	13.98	23.5	_
	1429 to 1501	26	39.7	_
	1565 to 1570	30	46.5	_
Attenuation (dB)	1570 to 1580	35	46.8	_
	1580 to 1607	30	46.9	_
	1920 to 1980	20	32.4	_
Power Handling (W)	470 to 787	_	_	3
Characteristic Impedance ( $\Omega$ )			50 (Nominal)	

<sup>•</sup> Ta: +25±5°C

#### ■TEMPERATURE RANGE

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

<sup>•</sup> All specifications are subject to change without notice.

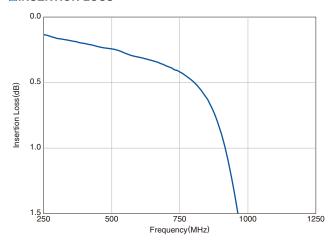
<sup>•</sup> Before using these products, be sure to request the delivery specifications.



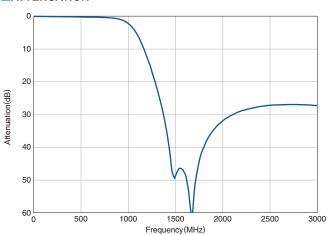
### DEA160787LT-5032A1

#### **■ FREQUENCY CHARACTERISTICS**

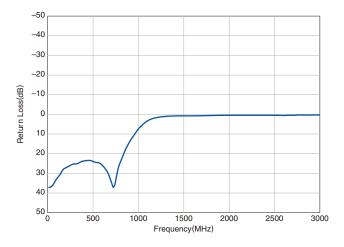
#### □INSERTION LOSS



#### **ATTENUATION**



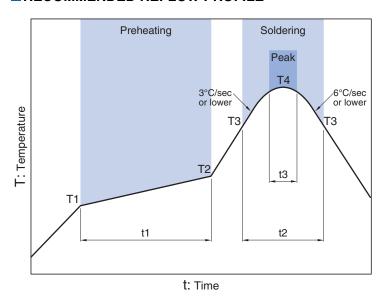
#### □RETURN LOSS



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<sup>•</sup> Before using these products, be sure to request the delivery specifications.

#### ■ RECOMMENDED REFLOW PROFILE



Preheating			Soldering Critical zone (T3 to T4) Peak			
Temp.		Time	Temp.	Time	Temp.	Time
T1	T2	t1	Т3	t2	T4	t3*
150°C	200°C	60 to 120sec	217°C	60 to 120sec	240 to 260°C	30sec max.

<sup>\*</sup> t3 : Time within  $5^{\circ}$ C of actual peak temperature

The maximum number of reflow is 3.

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#### REMINDERS FOR USING THESE PRODUCTS

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#### **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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