



# Multilayer Low Pass Filter

For 673-2690MHz

# DEA162690LT-5051B1

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**1.6x0.8mm [EIA 0603]\***

\* Dimensions Code JIS[EIA]

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# Multilayer Low Pass Filter

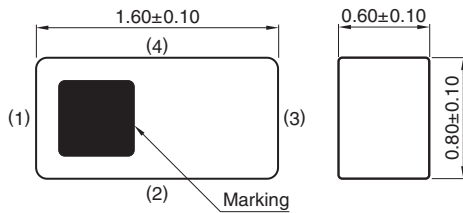
Conformity to RoHS Directive

For 673-2690MHz

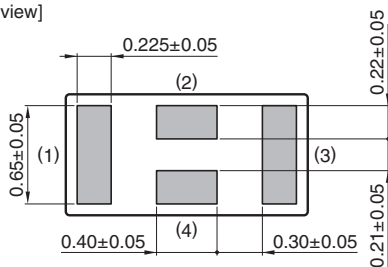
## DEA162690LT-5051B1

### SHAPES AND DIMENSIONS

[Top view]



[Bottom view]

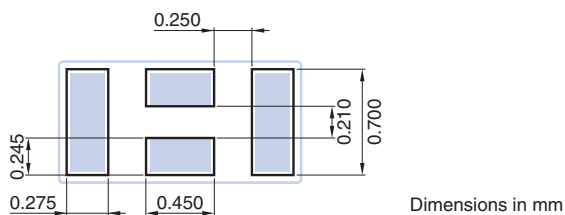


Terminal functions

1	In/Out Port
2	GND
3	Out/In Port
4	GND

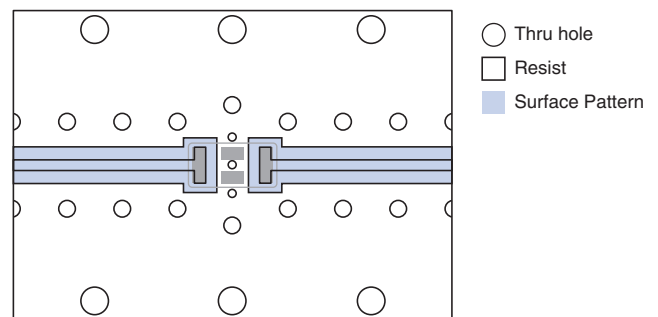
Dimensions in mm

### RECOMMENDED LAND PATTERN



Dimensions in mm

### EVALUATION BOARD



Material, Layer	Thickness
Top Resist	Resist
Copper Surface Pattern	0.035mm
FR-4	0.10mm
Copper Inner GND	0.018mm
FR-4	0.30mm
Copper Bottom GND	0.035mm

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

○ RoHS Directive Compliant Product: See the following for more details. <https://product.tdk.com/info/en/environment/rohs/index.html>

- 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

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Insertion Loss (dB)	673 to 2690	—	0.37	0.50
	673 to 2690	—	—	0.60 (−40 to +85°C)
Ripple (dB) (Over any 200 MHz range)	673 to 2690	—	0.07	0.20
Group Delay Ripple (ns) (Over any 20 MHz range)	673 to 2690	—	0.01	—
Return Loss (dB)	673 to 2690	9.54	14.3	—
Attenuation (dB)	4950 to 6000	35	42.3	—
	6000 to 12750	45	49.0	—
Power Handling (dBm)		—	—	35
Characteristic Impedance ( $\Omega$ )			50 (Nominal)	

· Ta: +25±5°C

### TEMPERATURE RANGE

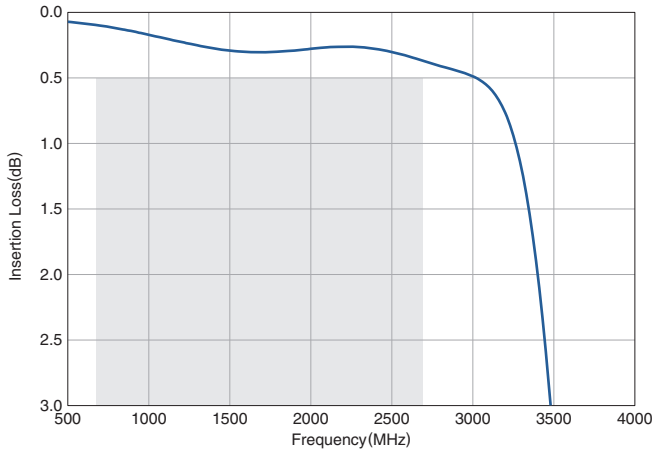
Operating temperature (°C)	Storage temperature (°C)
−40 to +85	−40 to +85

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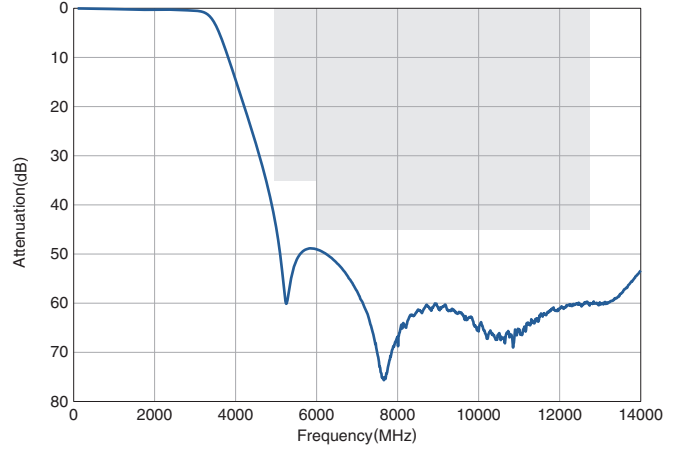
# DEA162690LT-5051B1

## FREQUENCY CHARACTERISTICS

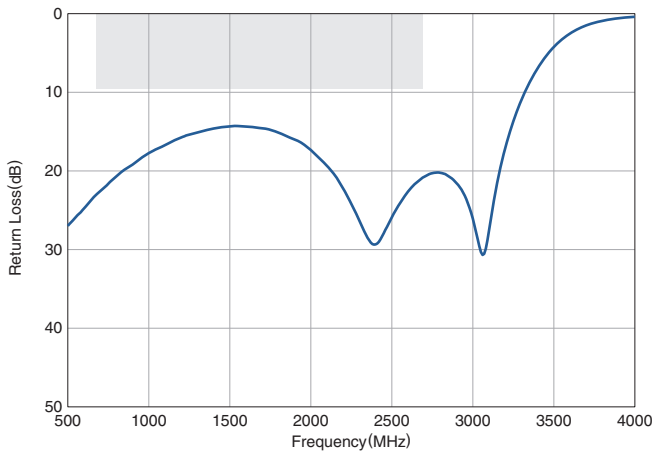
### INSERTION LOSS



### ATTENUATION

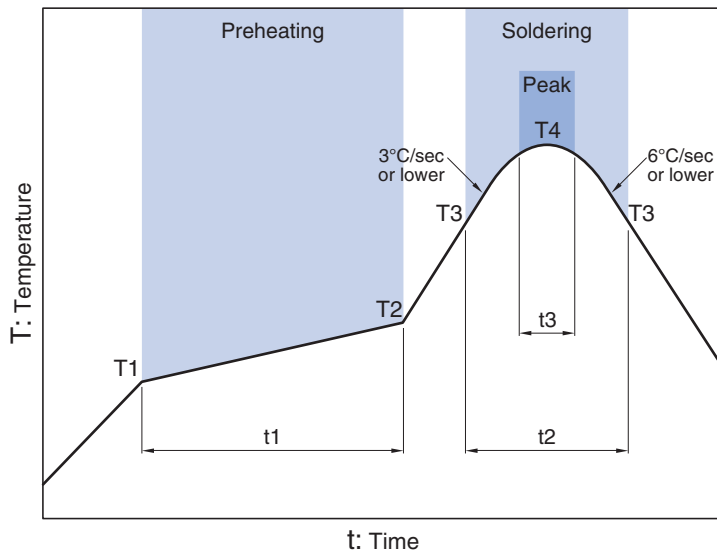


### RETURN LOSS



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## DEA162690LT-5051B1

**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                                  | (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.