



Oct. 2016 Ver.3.1  
TDK Corporation

## Multilayer Low Pass Filter

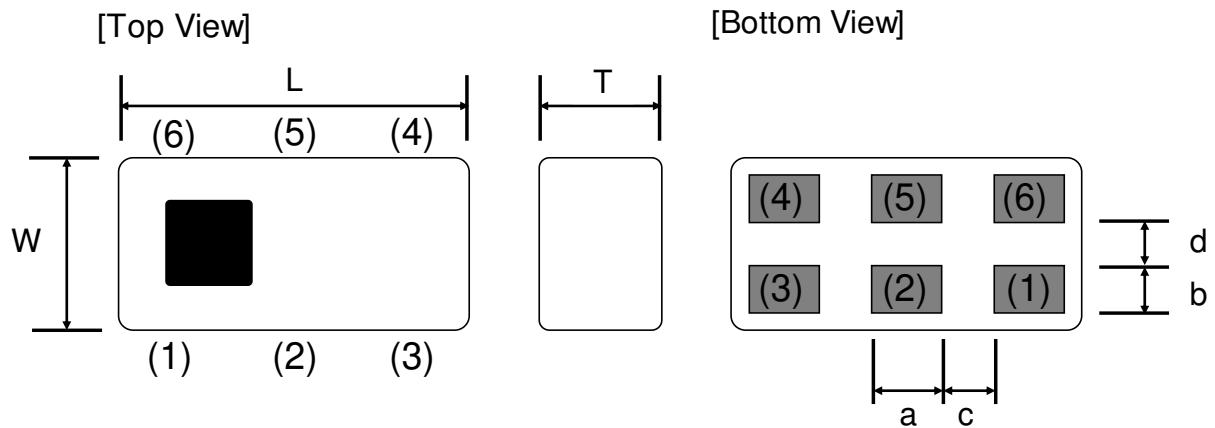
For 700-3800MHz

DEA Series 1.0x0.5mm [EIA 0402] TYPE

P/N: **DEA103800LT-6328B3**

## DEA103800LT-6328B3

### ■ SHAPES AND DIMENSIONS



Dimensions (mm)

L	W	T	a	b	c	d
1.00	0.50	0.40	0.18	0.125	0.18	0.15
+/-0.05	+/-0.05	Max	+/-0.05	+/-0.05	+/-0.05	+/-0.05

Terminal functions

(1)	NC
(2)	GND
(3)	NC

(4)	Output Port
(5)	GND
(6)	Input Port

### ■ TEMPERATURE RANGE

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

### ■ TERMINATION FINISH

Material
Au plate

## DEA103800LT-6328B3

### ■ ELECTRICAL CHARACTERISTICS

( Measurement )

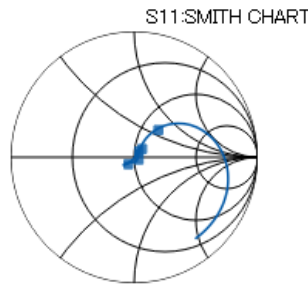
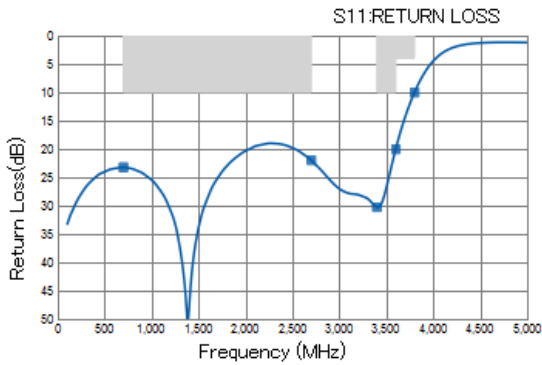
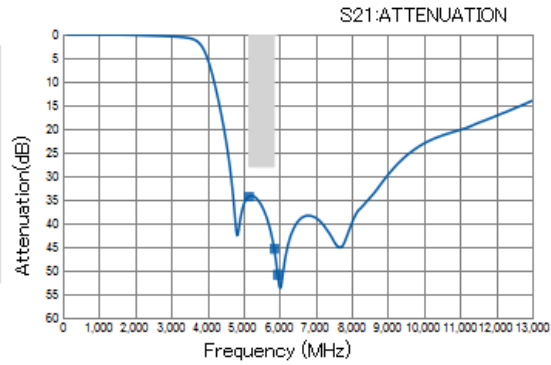
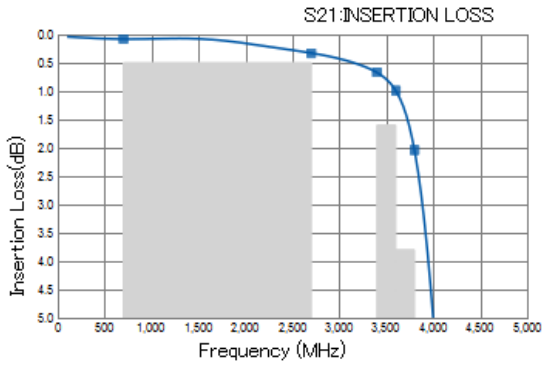
Parameter	Frequency (MHz)	TDK Target Spec		
		Min.	Typ.	Max.
Insertion Loss (dB)	700 to 2700	-	0.33	0.50
	3400 to 3600	-	0.99	1.60
	3600 to 3800	-	2.04	3.80
Insertion Loss (dB) ( -40 to +85 °C )	700 to 2700	-	-	0.60
	3400 to 3600	-	-	1.90
	3600 to 3800	-	-	4.60
Return Loss (dB)	700 to 2700	10	19	-
	3400 to 3600	10	20	-
	3600 to 3800	4	10	-
Attenuation (dB)	5150 to 5850	28	34	-
Input Power Rating (W) ( 50% duty )	700 to 2700	-	-	4
	3400 to 3800	-	-	2
Characteristic Impedance (ohm)		50 (Nominal)		

Ta = +25+/-5°C

# DEA103800LT-6328B3

## FREQUENCY CHARACTERISTICS

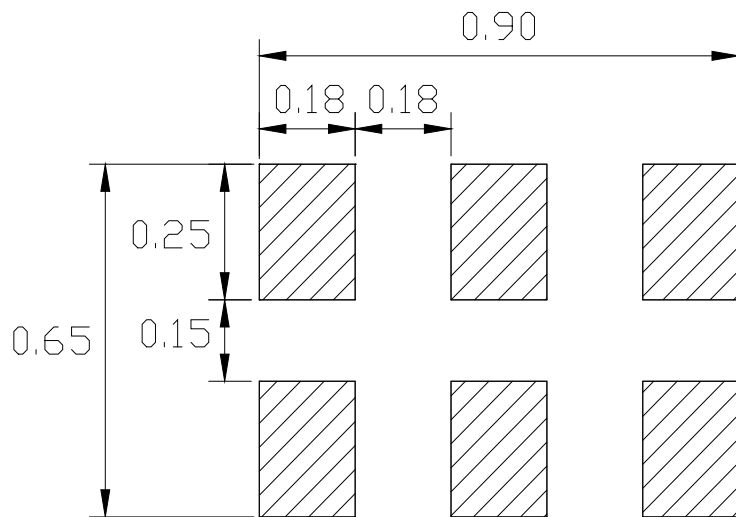
( Measurement )



-	1
MHz	Re / Im
700	0.03 / 0.06
2700	-0.06 / -0.06
3400	0.03 / -0.01
3600	0.06 / 0.08
3800	0.2 / 0.24

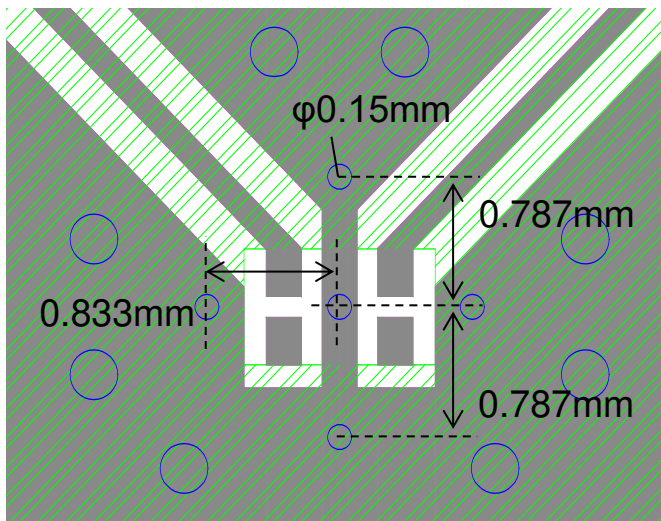
## DEA103800LT-6328B3

### ■ EVALUATION LAND PATTERN



Unit:mm

### ■ EVALUATION BOARD



- Thru Hole
- Resist
- Surface Pattern

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

## DEA103800LT-6328B3

### ■ SOLDERING INFORMATION

#### Metal Mask

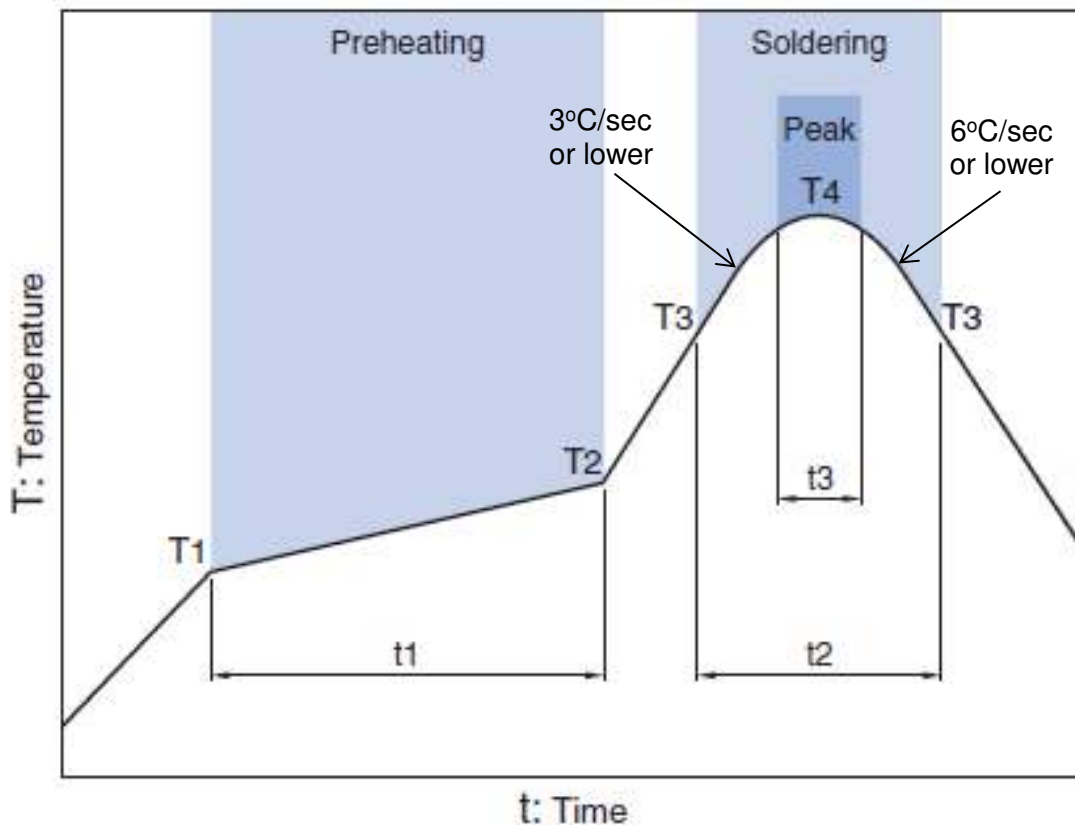
Thickness : 80um  
Opening to Land Pattern : 100%

#### Solder Paste

SAC ; Sn-3.0Ag-0.5Cu (TDK evaluation)

### ■ ENVIRONMENT INFORMATION

RoHS Statement  
RoHS Compliance

**DEA103800LT-6328B3****RECOMMENDED REFLOW PROFILE**

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

\* t3 : Time within 5°C of actual peak temperature

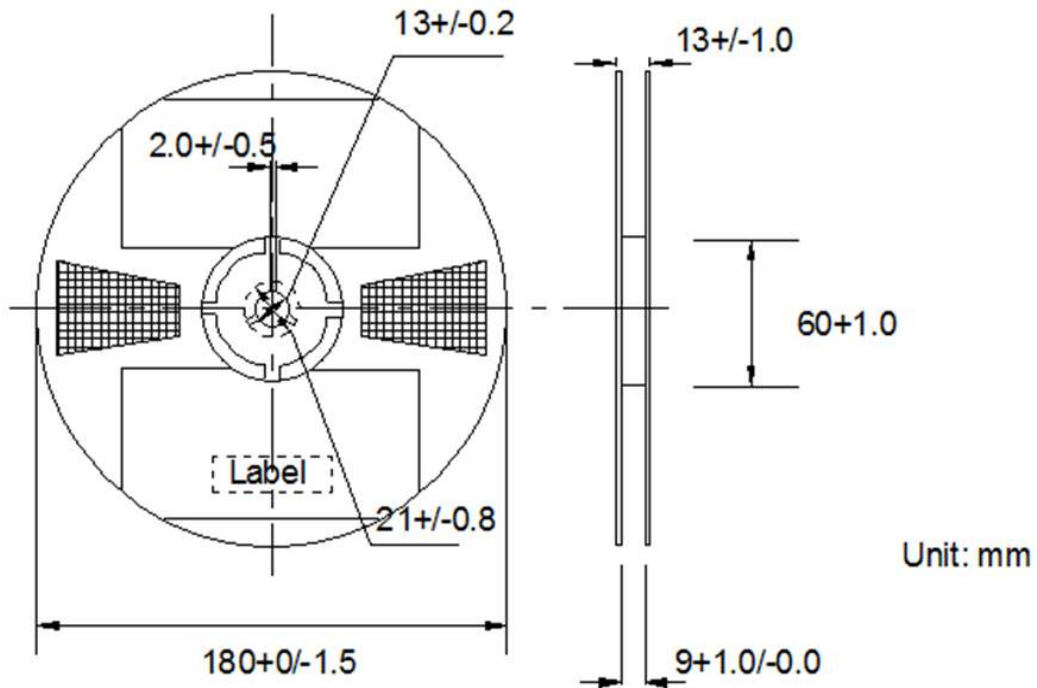
The maximum number of reflow is 3.

Note: Lead free solder is recommended.  
Recommended solder is Sn-3.0Ag-0.5Cu. (M705 by Senju Metal Industry)

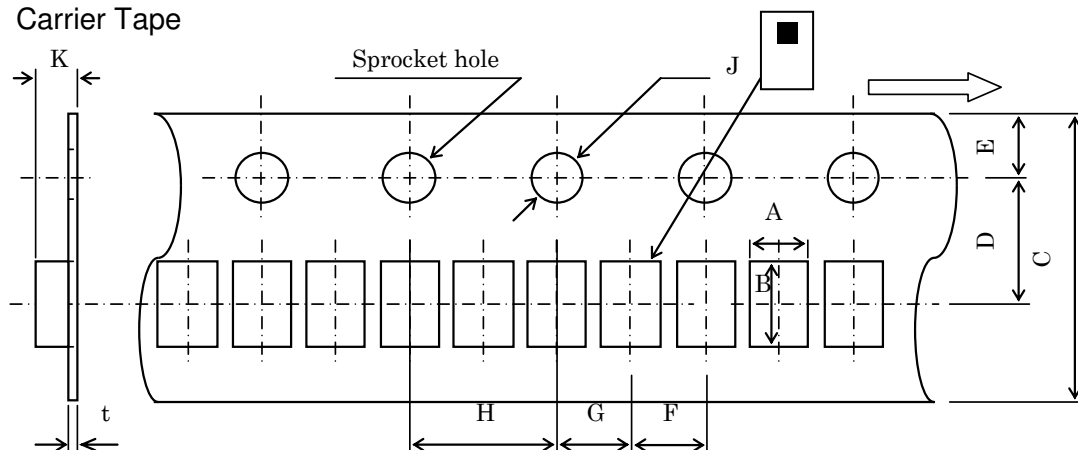
## DEA103800LT-6328B3

### PACKAGING STYLE

Reel Dimensions



Carrier Tape



Dimensions (mm)

A	B	C	D	E	F	G	H	J	K	t
0.62	1.12	8.0	3.5	1.75	2.0	2.0	4.0	1.5	0.48	0.25
+/-0.05	+/-0.05	+/-0.2	+/-0.05	+/-0.1	+/-0.05	+/-0.05	+/-0.05	+0.1/-0	MAX	+/-0.05

#### STANDARD PACKAGE QUANTITY

( pieces/reel )

10,000



## 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.