



Multilayer Low Pass Filter

For 777-787MHz

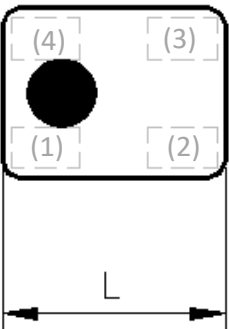
DEA Series 0.65x0.5mm [EIA 0202] TYPE

P/N: **DEA070787LT-4002A1**

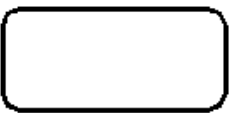
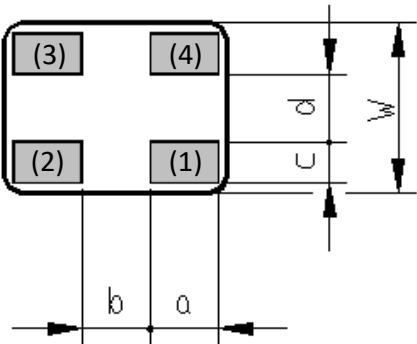
DEA070787LT-4002A1

SHAPES AND DIMENSIONS

[Top View]



[Bottom View]



Dimensions (mm)

L	W	T	a	b	c	d
0.65	0.50	0.25	0.20	0.20	0.115	0.21
+/-0.05	+/-0.05	+/-0.05	+/-0.05	+/-0.05	+/-0.05	+/-0.05

Terminal functions

(1)	Input Port
(2)	Output Port

(3)	GND
(4)	GND

TEMPERATURE RANGE

TERMINATION FINISH

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

Material
Ag

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■ ELECTRICAL CHARACTERISTICS

(Measurement)

Parameter	Frequency (MHz)	TDK Spec		
		Min.	Typ.	Max.
Insertion Loss (dB)	777 to 787	-	0.48	0.70
Insertion Loss (dB)	777 to 787	-	-	0.75
(-40 to +85 °C)				
Return Loss (dB)	777 to 787	13	27	-
Attenuation (dB)	1554 to 1607	30	41	-
	2400 to 2500	19	25	-
	5150 to 5850	9	15	-
Input Power Rating (W)		-	-	1
Characteristic Impedance (ohm)		50 (Nominal)		

Ta = +25+/-5°C

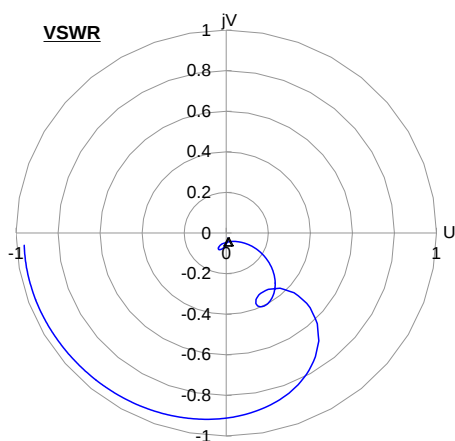
Jan. 2022 Ver.3.1

TDK Corporation

DEA070787LT-4002A1**FREQUENCY CHARACTERISTICS**

(Measurement)

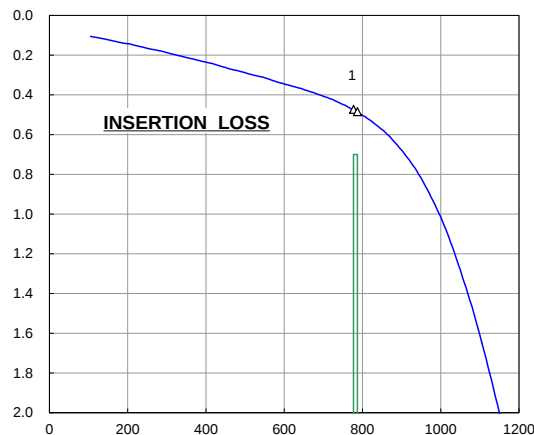
S11 POLA REF 1.0 U SCALE 1.0U FS



MARKER 1
777 MHz
1.09

MARKER 2
787 MHz
1.09

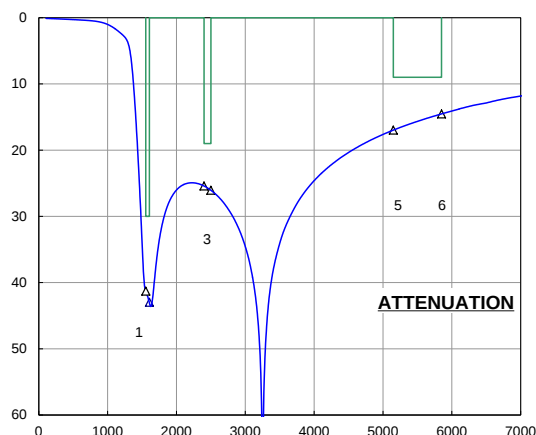
S21 Log MAG REF 0.0dB SCALE 2dB/



MARKER 1
777 MHz
0.47 dB

MARKER 2
787 MHz
0.48 dB

S21 Log MAG REF 0.0dB SCALE 5.0dB/



MARKER 1
1554 MHz
41.3 dB

MARKER 2
1607 MHz
43.0 dB

MARKER 3
2400 MHz
25.4 dB

MARKER 4
2500 MHz
26.1 dB

MARKER 5
5150 MHz
17.0 dB

MARKER 6
5850 MHz
14.5 dB

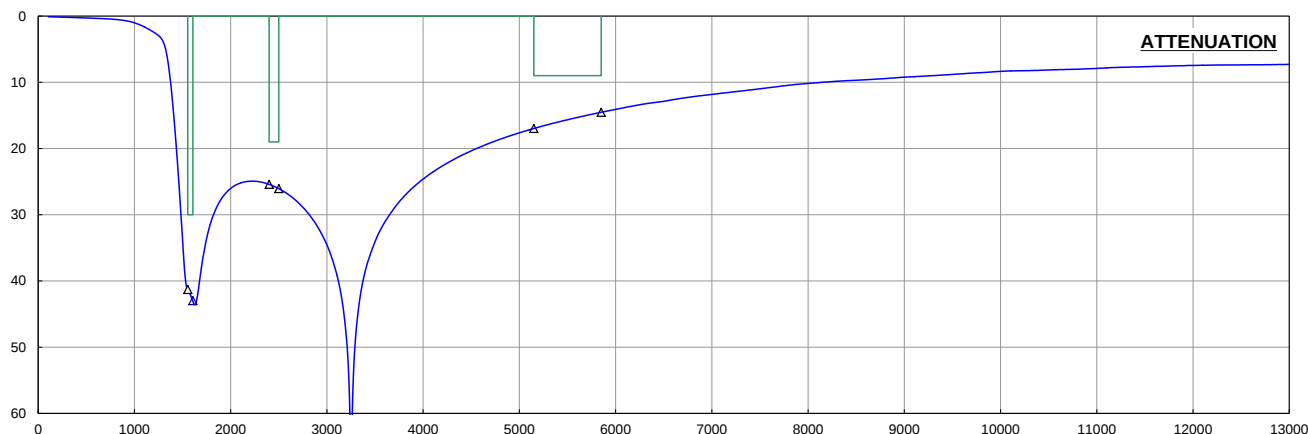
S11 Log MAG REF -10.0dB SCALE 5.0dB/



MARKER 1
777 MHz
26.9 dB

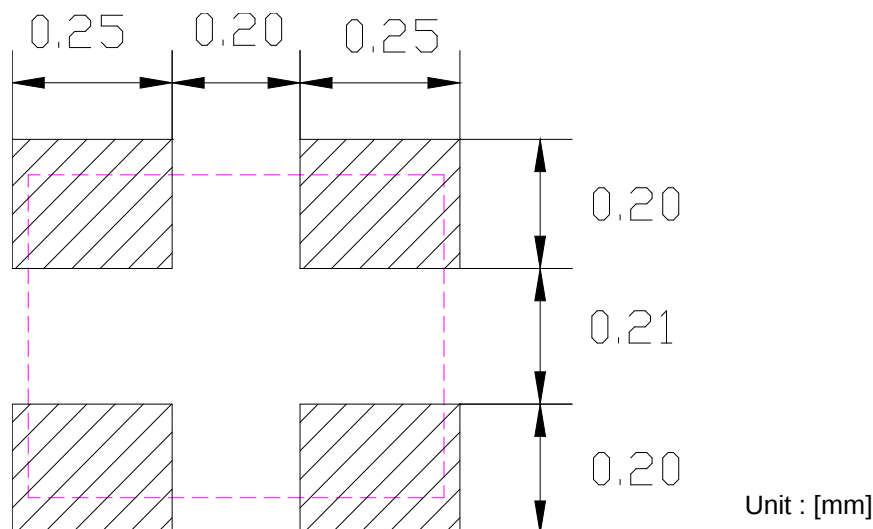
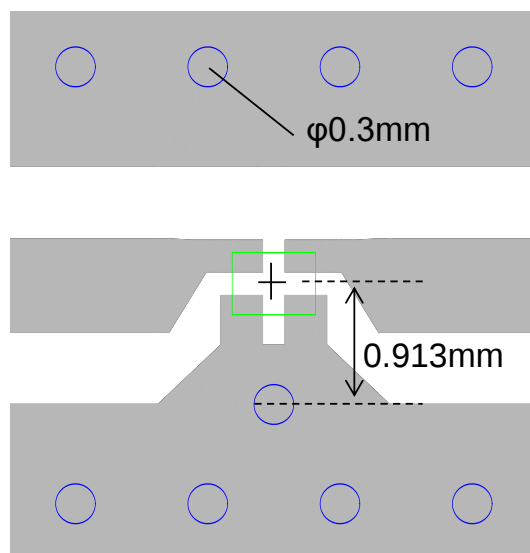
MARKER 2
787 MHz
26.9 dB

S21 Log MAG REF 0.0dB SCALE 5.0dB/



All specifications are subject to change without notice.

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DEA070787LT-4002A1**RECOMMENDED LAND PATTERN****EVALUATION BOARD**

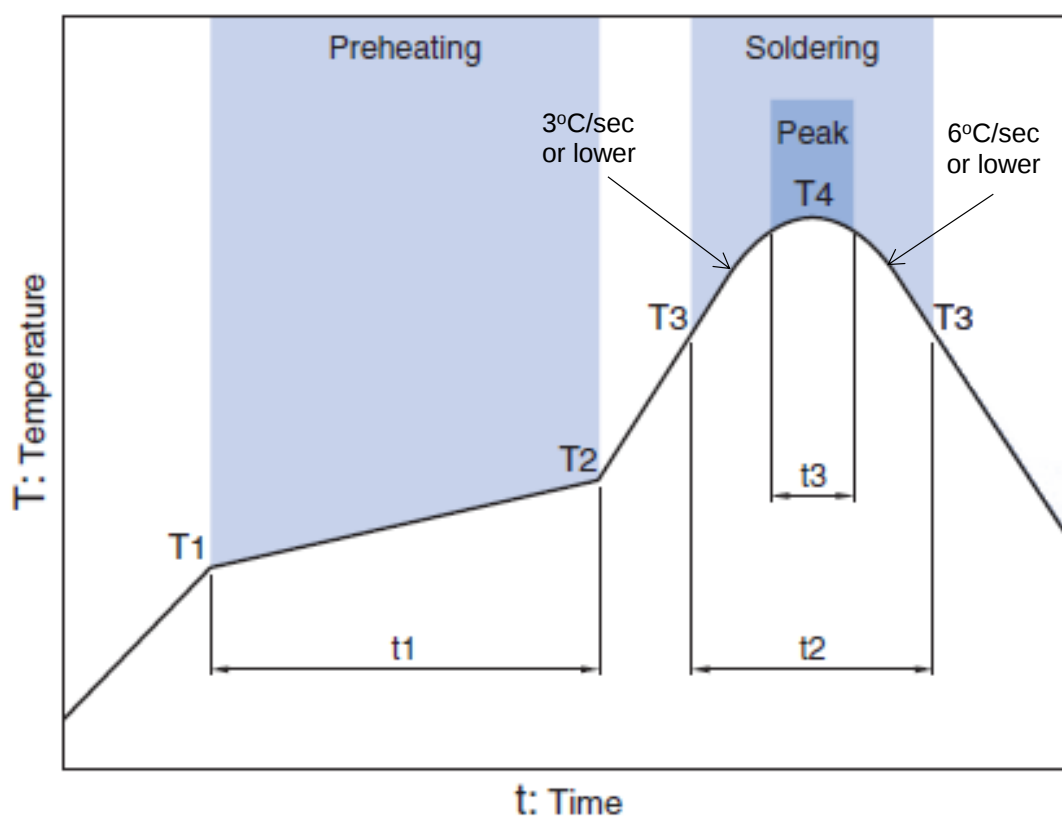
- Thru Hole
- Resist
- Surface Pattern

Material & Layer	Thickness
Top Resist	-
Copper Surface Pattern	0.035mm
FR-4	0.40mm
Copper Bottom GND	0.035mm

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

ENVIRONMENT INFORMATION

RoHS Statement
RoHS Compliance

DEA070787LT-4002A1**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	30 sec Max

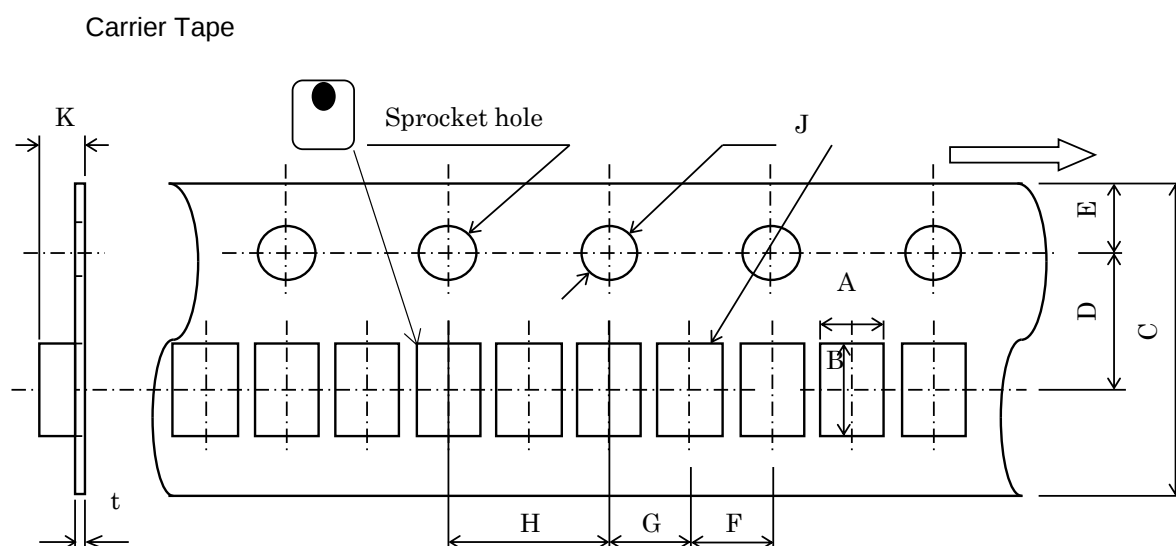
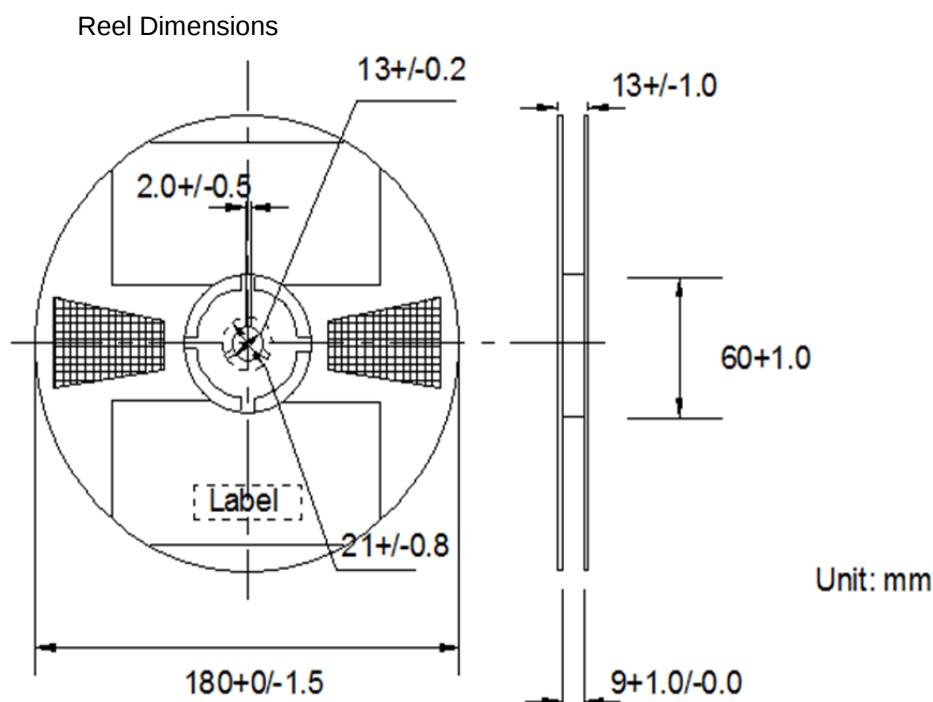
* t3 : Time within 5°C of actual peak temperature

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)

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PACKAGING STYLE



Dimensions (mm)

A	B	C	D	E	F	G	H	J	K	t
0.6	0.8	8.0	3.5	1.75	2.0	2.0	4.0	1.5	0.39	0.2
+/-0.03	+/-0.03	+0.3/-0.1	+/-0.05	+/-0.1	+/-0.05	+/-0.05	+/-0.1	+0.1/-0	MAX	+/-0.06

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.