

Multilayer Band Pass Filter

For 2400-2500MHz

DEA Series 1.6x0.8mm [EIA 0603] TYPE

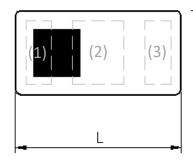
P/N: **DEA162450BT-1288A2**

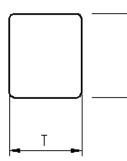


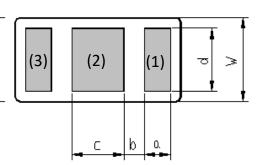
DEA162450BT-1288A2

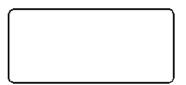
SHAPES AND DIMENSIONS

[Top View] [Bottom View]









Dimensions (mm)

L	W	T	а	b	С	d	
1.60	0.80	0.70	0.25	0.20	0.50	0.60	
+/-0.15	+/-0.10	Max	+/-0.10	+/-0.10	+/-0.10	+/-0.10	

Terminal functions

(1)	Input Port			
(2)	GND			
(3)	Output Port			

■ TERMINATION FINISH

Material
Ag



DEA162450BT-1288A2

ELECTRICAL CHARACTERISTICS

(Measurement)

Parameter	Freque	nev	/MHz\	TDK Spec		
raiametei	reque	псу	(1411 12)	Min.	Тур.	Max.
Insertion Loss (dB)	2400	to	2500	-	-	1.70
Insertion Loss (dB)	2400	2400 to 2500			-	2.00
(-40 to +85 °C)						
Return Loss@Input (dB)	2400	to	2500	10	-	-
Attenuation (dB)	800			25	-	-
	3	3200		20	-	-
	4800	to	5000	35	-	-
	7200	to	7500	25	-	-
Characteristic Impedance (ohm)		•		50	(Nomi	nal)

 $Ta = +25 + /-5 ^{\circ}C$

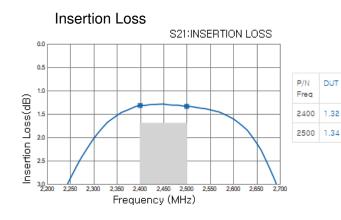
MAXIMUM RATINGS

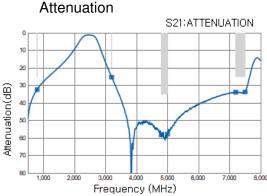
Parameter		TDK Spec	Conditions
Operating temperature (°C)		–40 to +85 °C	
Storage temperature (°C)		–40 to +85 °C	
Human Body Model : HBM	@Each Port (V)	+/-1000	100pF / 1500ohm
Machine Model : MM	@Each Port (V)	+/-150	200pF / 0ohm
Charged Device Model : CDM	@Each Port (V)	+/-500	Humidity: 60%RH max



DEA162450BT-1288A2

FREQUENCY CHARACTERISTICS

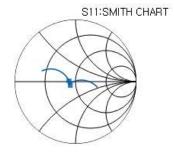




	P/N Freq	DUT
	800	32.41
-	3200	25.23
-	4800	58.15
	5000	57.71
1	7200	33.89
	7500	33.69
000		

Return Loss (Input Port) S11:RETURN LOSS P/N DUT Frea 2400 18.05 2500 18.76 Prequency (MHz)

Smith Chart (Input Port)

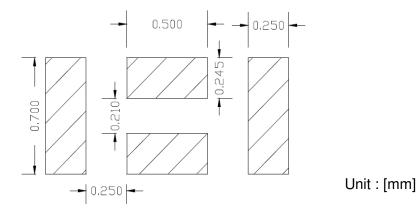


P/N Freq	DUT
2400	39 / 1.81
2500	40.58 / -4.55

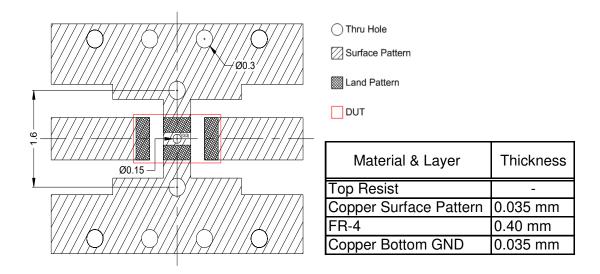


DEA162450BT-1288A2

RECOMMENDED LAND PATTERN



EVALUATION BOARD



- * Line width should be designed to match 50 ohm characteristic impedance depending on PCB material and thickness.
- ** The position of the throuh hole which have possibility of influence to the prerformance are indicated by dimension line.

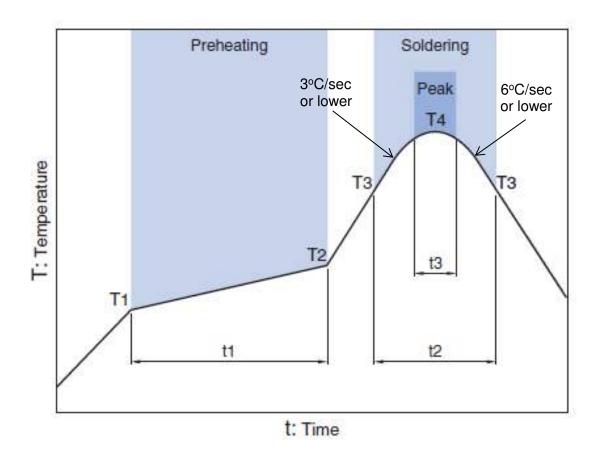
ENVIRONMENT INFORMATION

RoHS Statement RoHS Compliance



DEA162450BT-1288A2

RECOMMENDED REFLOW PROFILE



Preheating			Soldering						
Preneating		Critical zon	e (T3 to T4)	Peak					
Tei	mp.	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)

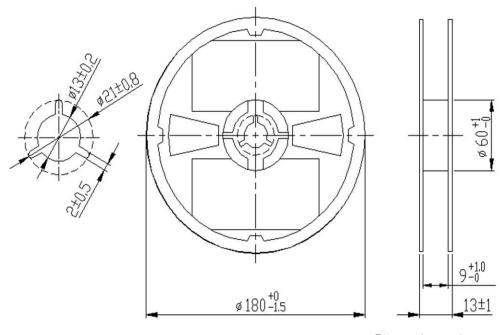
GENERAL TECHNICAL INFORMATION

https://product.tdk.com/en/system/file=dam/doc/product/rf/rf/coupler/general_tech_info/rf_general-technical-info_02_en.pdf

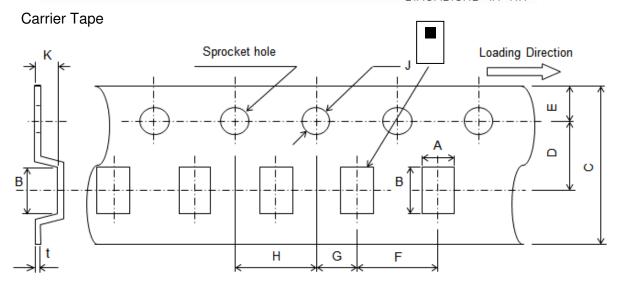
DEA162450BT-1288A2

PACKAGING STYLE

Reel Dimensions



Dimensions in mm



Dimensions (mm)

Α	В	C	D	Е	F	G	H	J	K	t
1.0	1.8	8.0	3.5	1.75	4.0	2.0	4.0	1.5	0.8	0.25
+/-0.05	+/-0.05	+/-0.2	+/-0.05	+/-0.1	+/-0.1	+/-0.05	+/-0.1	+0.1/-0	MAX	+/-0.05

STANDARD PACKAGE QUANTITY
(pieces/reel)
4,000



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
- (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.

[•] All specifications are subject to change without notice.

[•] Before using these products, be sure to request the delivery specifications.