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TDK Corporation

Multilayer High Pass Filter

For 2400-2500MHz

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

P/N: **DEA162400HT-8053A1**

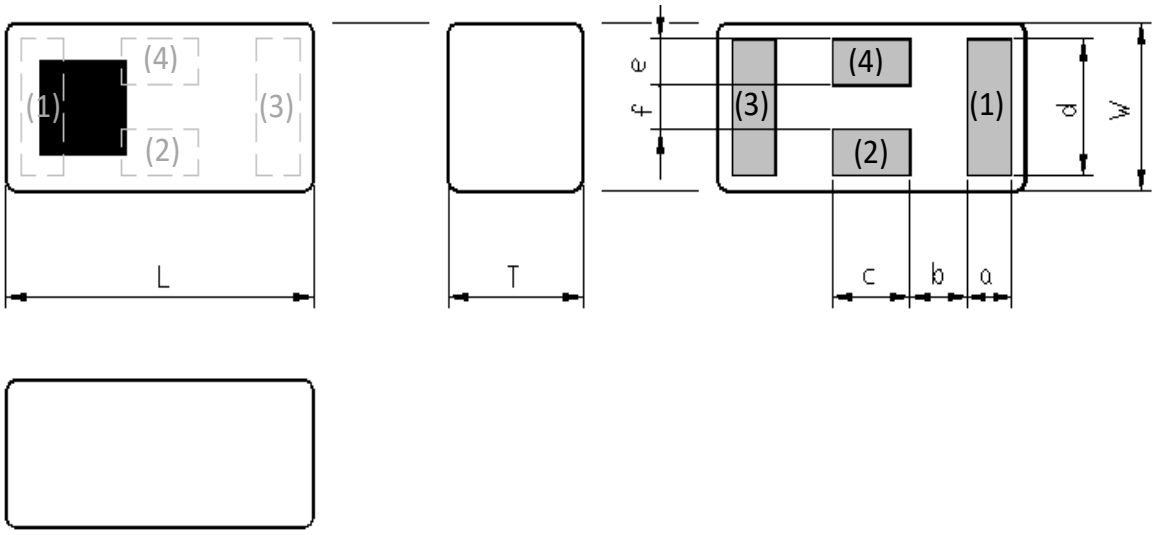
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SHAPES AND DIMENSIONS

[Top View] [Bottom View]



Dimensions (mm)

L	W	T	a	b	c	d	e	f
1.60 +/-0.10	0.80 +/-0.10	0.65 Max	0.225 +/-0.05	0.30 +/-0.05	0.40 +/-0.05	0.65 +/-0.05	0.22 +/-0.05	0.21 +/-0.05

Terminal functions

(1)	Input Port
(2)	GND

(3)	Output Port
(4)	GND

DC Cut
YES. IN and OUT are isolated at DC.

TERMINATION FINISH

Material
Au plate

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ELECTRICAL CHARACTERISTICS

(Measurement)

Parameter	Frequency (MHz)	TDK Spec		
		Min.	Typ.	Max.
Insertion Loss (dB)	2400 to 2500	-	0.47	0.70
Insertion Loss (dB) (–40 to +90 °C)	2400 to 2500	-	-	0.85
Return Loss	2400 to 2500	10	18.2	-
Attenuation (dB)	1574 to 1606	30	38.8	-
Characteristic Impedance (ohm)		50 (Nominal)		

Ta = +25+/-5°C

MAXIMUM RATINGS

Parameter		TDK Spec	Conditions
Operating temperature (°C)		–40 to +90 °C	
Storage temperature (°C)		–40 to +90 °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

*1 : Refer to 3GPP TS 38.101-1 V15.2.0

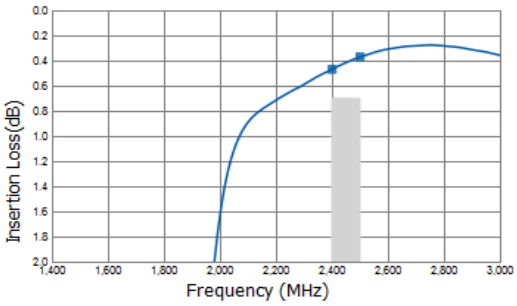
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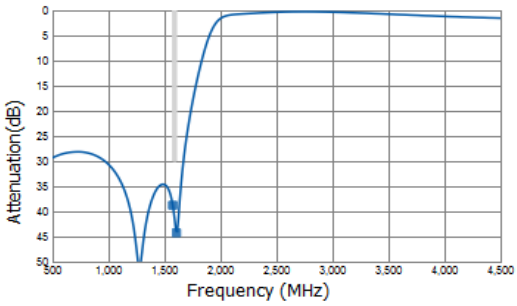
FREQUENCY CHARACTERISTICS

S21:INSERTION LOSS



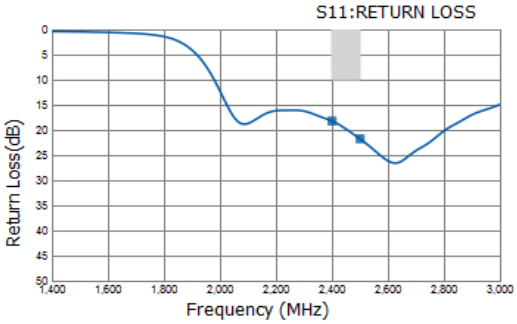
P/N	DEA162400HT-8053A1_v1.0
2400	0.47
2500	0.37

S21:ATTENUATION



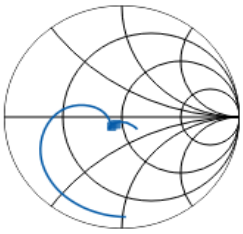
P/N	DEA162400HT-8053A1_v1.0
1574	38.78
1606	44.26

S11:RETURN LOSS



P/N	DEA162400HT-8053A1_v1.0
2400	18.24
2500	21.77

S11:SMITH CHART



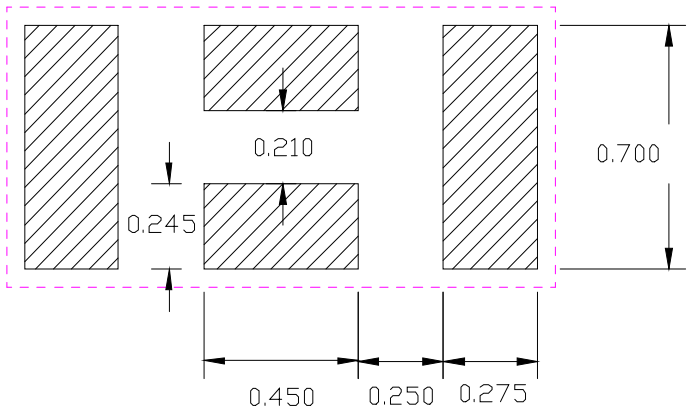
P/N	DEA162400HT-8053A1_v1.0
2400	-0.1 / -0.08
2500	-0.06 / -0.06

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■ RECOMMENDED LAND PATTERN



Unit : [mm]

■ ENVIRONMENT INFORMATION

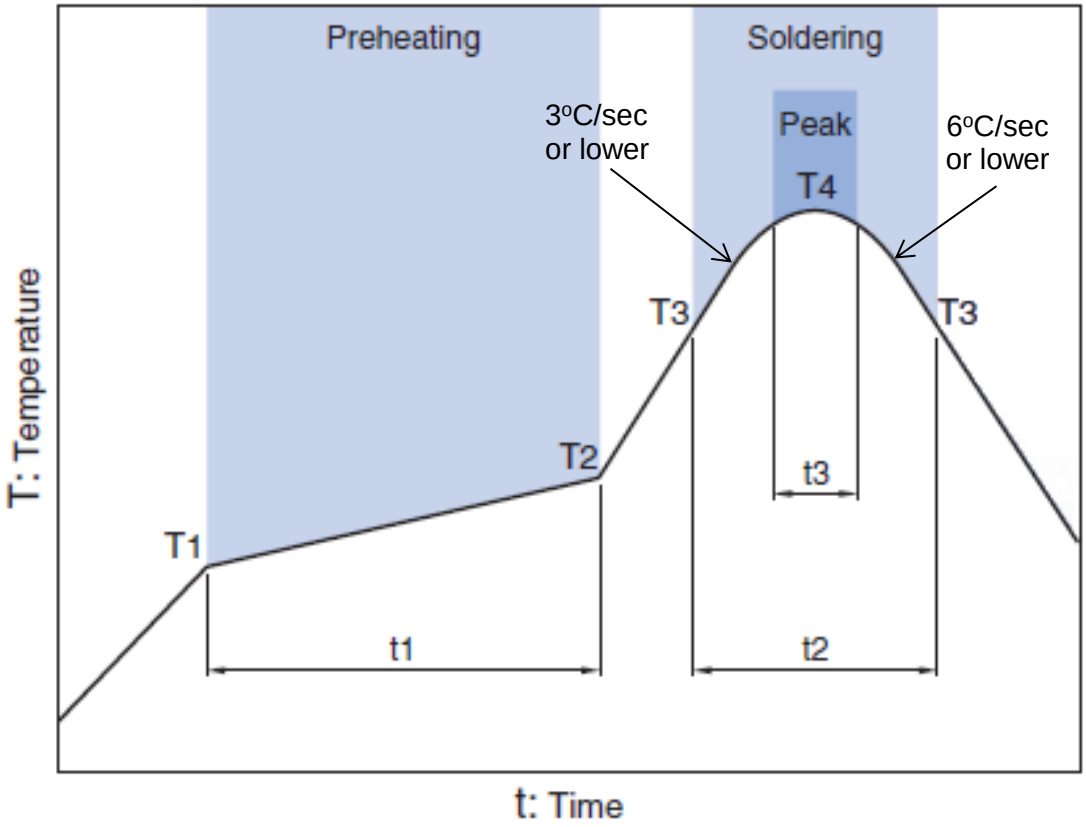
RoHS Statement
RoHS Compliance

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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)

GENERAL TECHNICAL INFORMATION

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

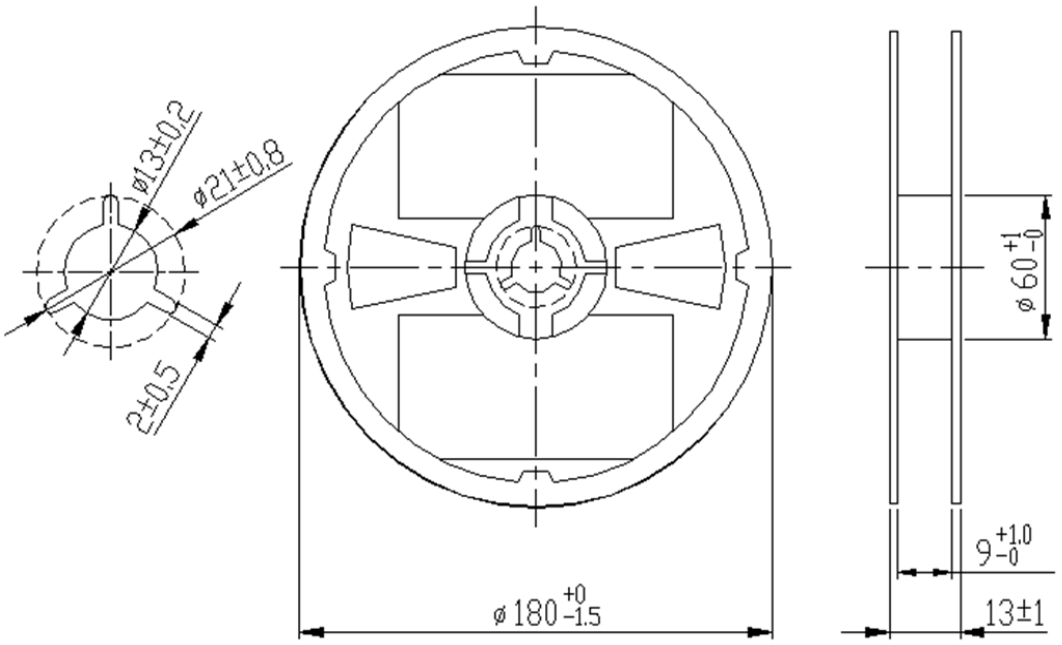
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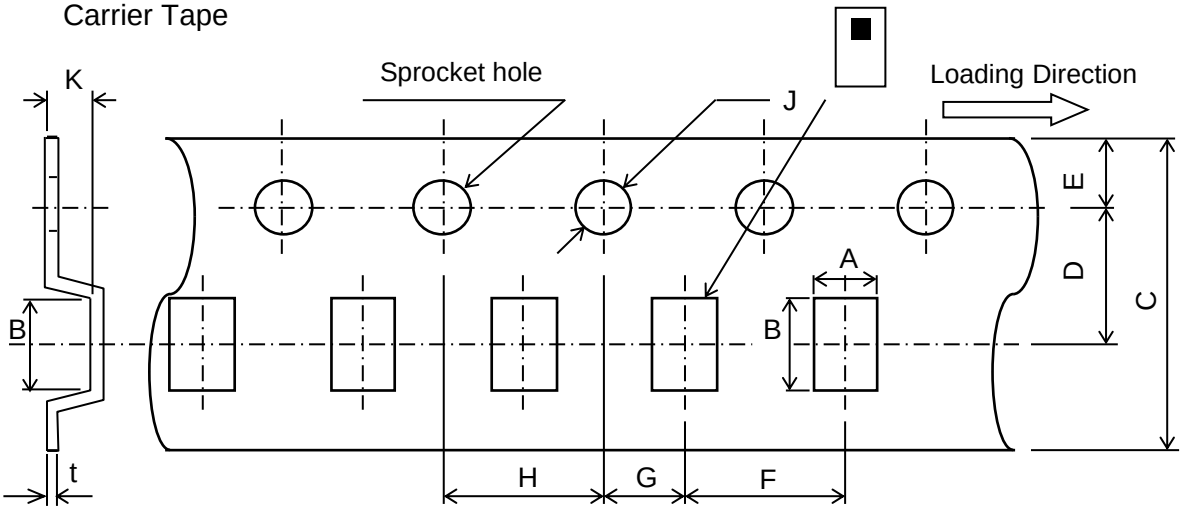
DEA162400HT-8053A1

■ PACKAGING STYLE

Reel Dimensions



Carrier Tape



Dimensions (mm)

A	B	C	D	E	F	G	H	J	K	t
0.97 +/-0.05	1.8 +/-0.05	8.0 +/-0.2	3.5 +/-0.05	1.75 +/-0.1	4.0 +/-0.1	2.0 +/-0.05	4.0 +/-0.1	1.5 +0.1/-0	0.8 MAX	0.25 +/-0.05

STANDARD PACKAGE QUANTITY (pieces/reel)
4,000

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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.