



Jul. 2018 Ver.1.0
TDK Corporation

Multilayer Band Pass Filter

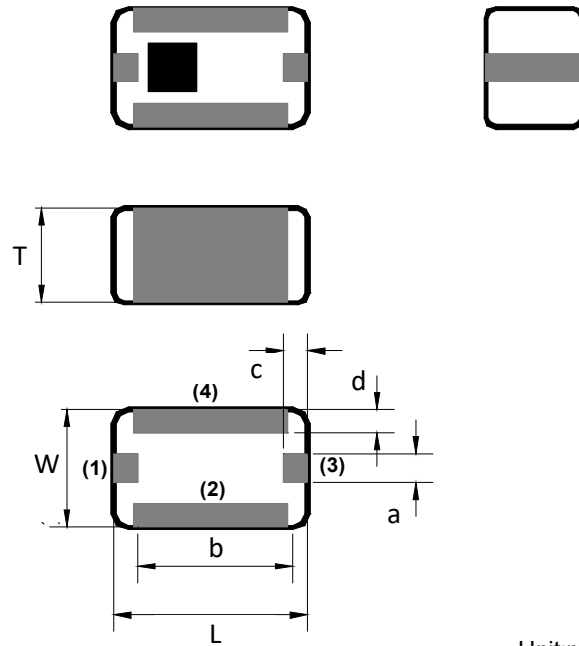
For 5GHz W-LAN

DEA Series 2.0x1.25mm [EIA 0805] TYPE

P/N: **DEA205425BT-2190E2**

DEA205425BT-2190E2

■ SHAPES AND DIMENSIONS



Unit:mm

Dimensions (mm)

L	W	T	a	b	c	d
2.00	1.25	1.00	0.30	1.60	0.25	0.25
+/-0.15	+/-0.15	Max	+/-0.15	+/-0.15	+/-0.20	+/-0.20

Terminal functions

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

DC Cut

No. There is NOT a DC Cut between the IN & OUT & GND.

■ TERMINATION FINISH

Material
Sn plate

DEA205425BT-2190E2

■ ELECTRICAL CHARACTERISTICS

(Measurement)

Parameter	Frequency (MHz)	TDK Spec		
		Min.	Typ.	Max.
Insertion Loss (dB)	4920 to 5950	-	0.81	1.00
Insertion Loss (dB) (-40 to +95 °C)	4920 to 5950	-	-	1.20
VSWR (Input / Output Port)	4920 to 5950	-	1.19	2.0
Attenuation (dB)	980 to 1190	30	35.3	-
	1960 to 2380	26	30.3	-
	2940 to 3900	26	31.6	-
	7250 to 9520	26	35.0	-
Characteristic Impedance (ohm)		50 (Nominal)		

 $T_a = +25 \pm 5^\circ\text{C}$

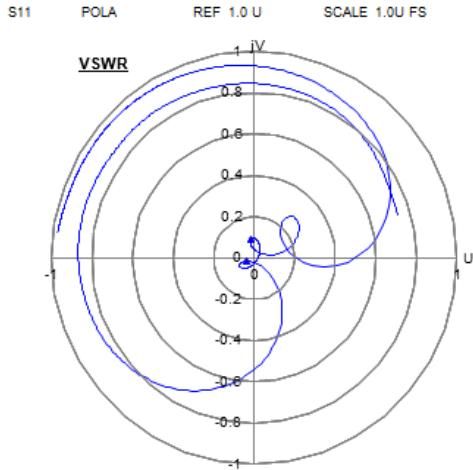
■ MAXIMUM RATINGS

Parameter	TDK Spec		Conditions
	Min.	Max.	
Operating temperature (°C)	-40 to +95 °C		
Storage temperature (°C)	-40 to +95 °C		
Power Handling (W)	-	3	CW
Human Body Model : HBM @Each Port (V)	-1000	1000	100pF / 1500ohm
Machine Model : MM @Each Port (V)	-150	150	200pF / 0ohm
Charged Device Model : CDM @Each Port (V)	-500	500	Relative humidity : 51%RH max

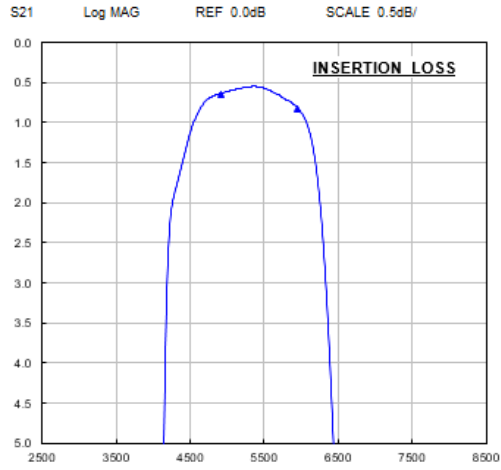
Ambient temperature : +25±5°C

DEA205425BT-2190E2

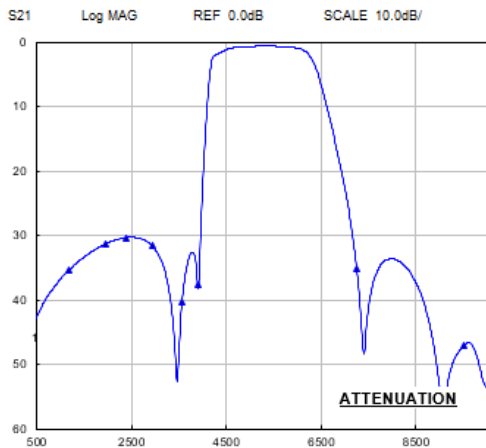
FREQUENCY CHARACTERISTICS



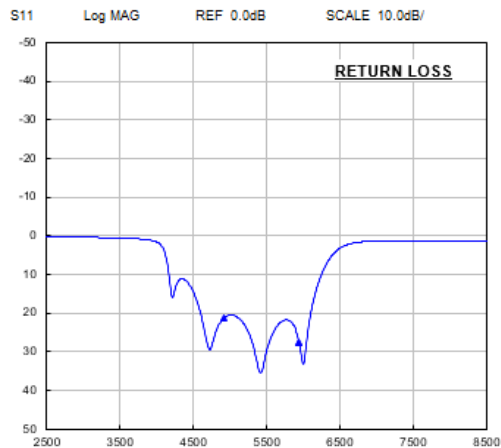
MARKER 1
4920.0 MHz
1.19
MARKER 2
5950.0 MHz
1.09
MARKER 3



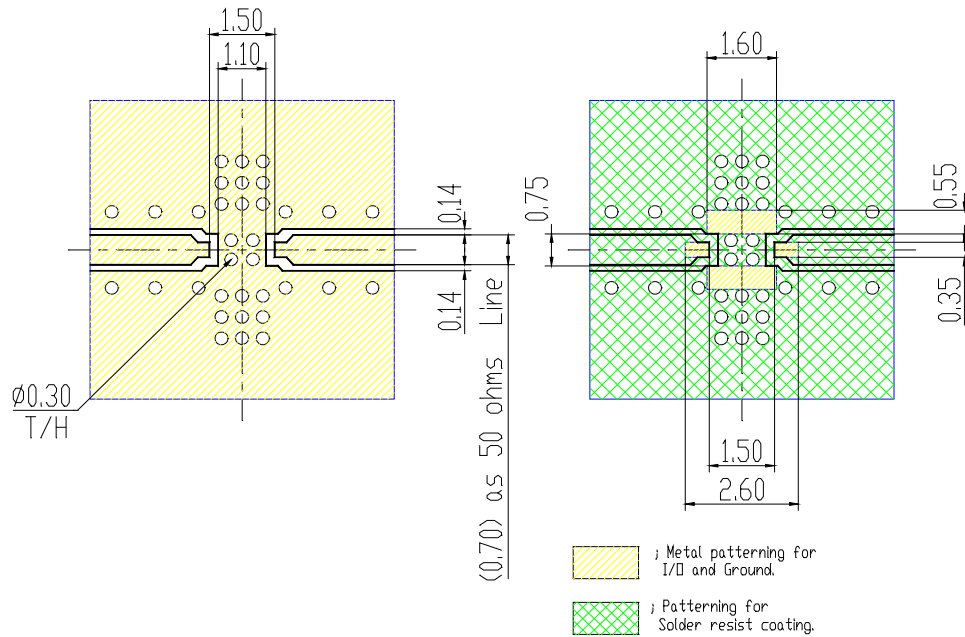
MARKER 1
4920.0 MHz
0.63 dB
MARKER 2
5950.0 MHz
0.81 dB



MARKER 1
1190.0 MHz
35.3 dB
MARKER 2
1980.0 MHz
31.2 dB
MARKER 3
2380.0 MHz
30.3 dB
MARKER 4
2940.0 MHz
31.6 dB
MARKER 5
3570.0 MHz
40.2 dB
MARKER 6
3900.0 MHz
37.6 dB
MARKER 7
7250.0 MHz
35.0 dB
MARKER 8
9520.0 MHz
47.0 dB



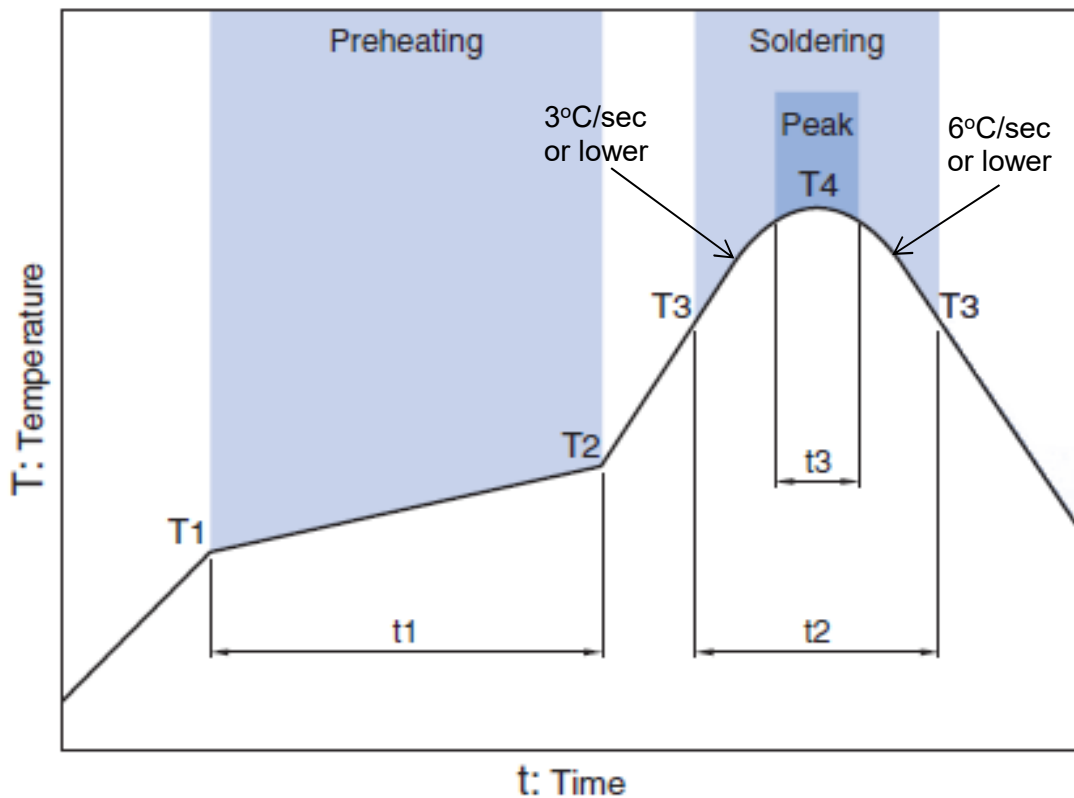
MARKER 1
4920.0 MHz
21.1 dB
MARKER 2
5950.0 MHz
27.6 dB

DEA205425BT-2190E2**EVALUATION BOARD****ENVIRONMENT INFORMATION**

RoHS Statement
RoHS Compliance

DEA205425BT-2190E2

■ RECOMMENDED REFLOW PROFILE



Preheating			Soldering			
			Critical zone (T3 to T4)		Peak	
Temp.	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

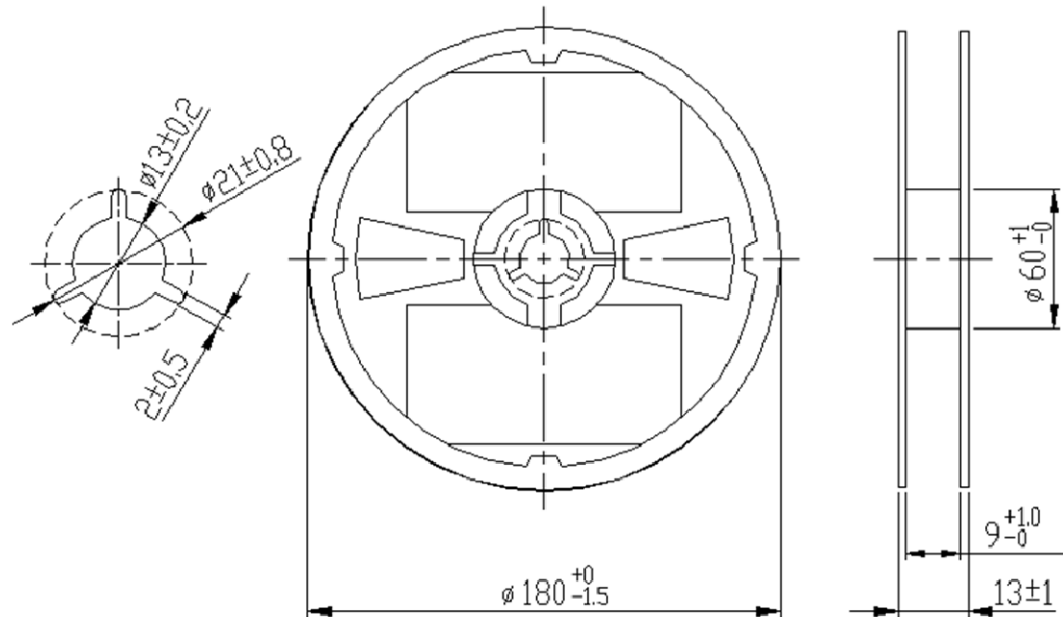
* t3 : Time within 5°C of actual peak temperature

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)

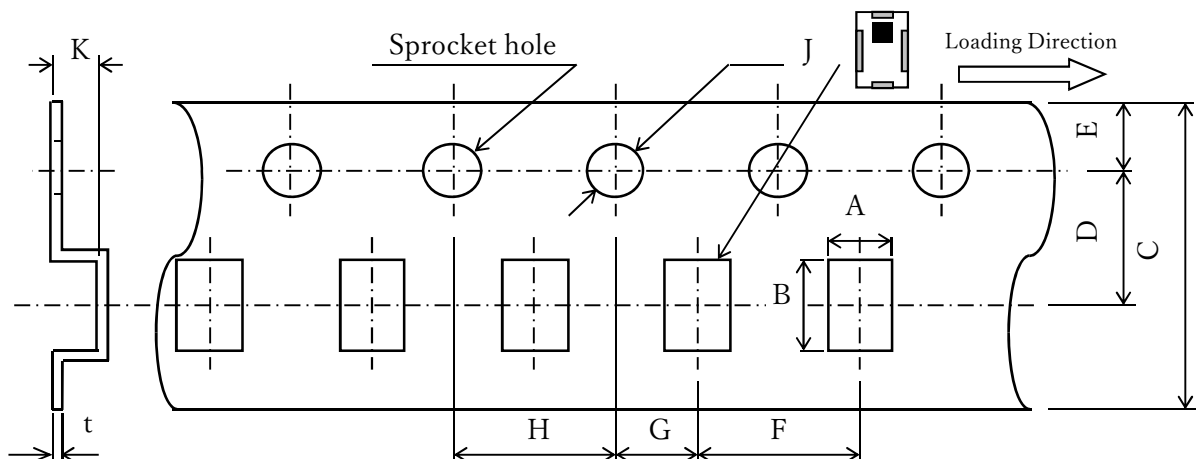
DEA205425BT-2190E2**PACKAGING STYLE**

Reel Dimensions



Dimensions in mm

Carrier Tape



Dimensions (mm)

A	B	C	D	E	F	G	H	J	K	t
1.45	2.2	8.0	3.5	1.75	4.0	2.0	4.0	1.5	1.15	0.25
± 0.05	± 0.05	$+0.3/-0.1$	± 0.05	± 0.1	± 0.1	± 0.05	± 0.1	$+0.1/-0$	MAX	± 0.05

STANDARD PACKAGE QUANTITY
(pieces/reel)

2,000

All specifications are subject to change without notice.

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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
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The products listed on this specification sheet 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 specification sheet.

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.