



## Multilayer Triplexer

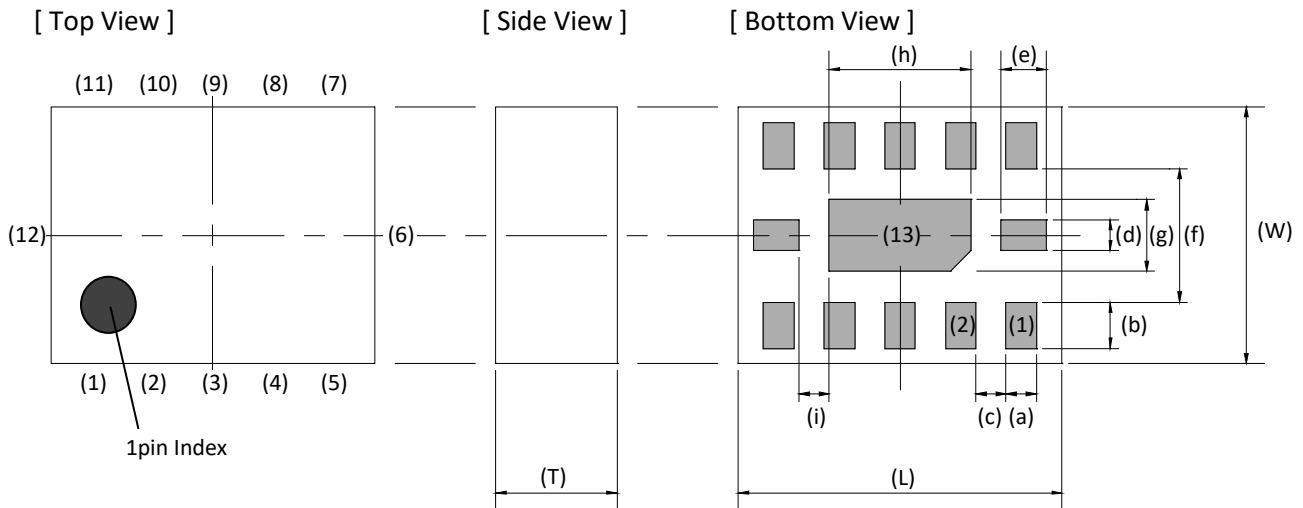
For 698-960MHz / 1710-2170MHz / 2300-2690MHz

DPX Series 3.2x2.5mm [EIA 1210] TYPE

P/N: **TPX322690MT-7017C1**

## TPX322690MT-7017C1

### SHAPES AND DIMENSIONS



Dimensions (mm)

L	W	T	a	b	c	d	e	f	g	h	i
3.20	2.50	1.00	0.30	0.45	0.30	0.30	0.45	1.30	0.70	1.40	0.30
+/-0.10	+/-0.10	Max	+/-0.10	+/-0.10	+/-0.10	+/-0.10	+/-0.10	+/-0.10	+/-0.10	+/-0.15	+/-0.10

Terminal functions

(1)	Common Port	(6)	GND	(11)	Low-Band Port
(2)	GND	(7)	Mid-Band Port	(12)	GND
(3)	GND	(8)	GND	(13)	GND
(4)	GND	(9)	GND		
(5)	High-Band Port	(10)	GND		

### TEMPERATURE RANGE

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

### TERMINATION FINISH

Material
Au plate

## TPX322690MT-7017C1

### ■ ELECTRICAL CHARACTERISTICS

( Measurement )

#### Low-Band

Parameter	Frequency (MHz)	TDK Spec		
		Min.	Typ.	Max.
Insertion Loss (dB)	698 to 960	-	0.30	0.70
Insertion Loss (dB) ( -40 to +85 °C )	698 to 960	-	-	0.80
Isolation (dB)	-Mid 1710 to 2170	25	34	-
	-High 2300 to 2690	25	31	-
Return Loss (dB)	698 to 960	18	25	-
Power Capacity(W)	698 to 960	-	-	3

Ta = +25+/-5°C

#### Mid-Band

Parameter	Frequency (MHz)	TDK Spec		
		Min.	Typ.	Max.
Insertion Loss (dB)	1710 to 2170	-	1.90	2.40
Insertion Loss (dB) ( -40 to +85 °C )	1710 to 2170	-	-	2.70
Isolation (dB)	-Low 698 to 960	25	27	-
	-High 2300 to 2690	8	14	-
Return Loss (dB)	1710 to 2170	10	15	-
Power Capacity(W)	1710 to 1910	-	-	3
	1910 to 2170	-	-	1

Ta = +25+/-5°C

#### High-Band

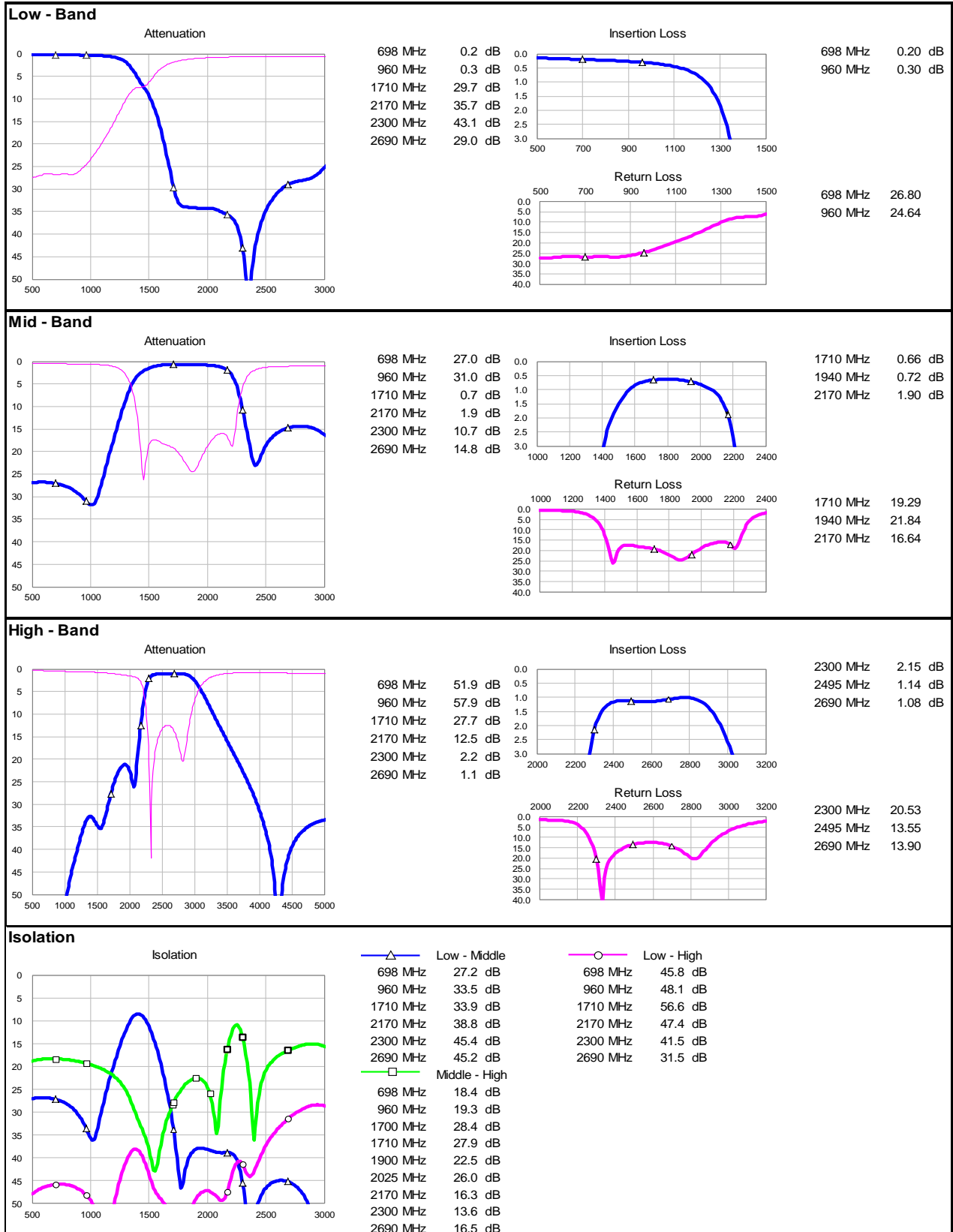
Parameter	Frequency (MHz)	TDK Spec		
		Min.	Typ.	Max.
Insertion Loss (dB)	2300 to 2690	-	2.15	2.80
Insertion Loss (dB) ( -40 to +85 °C )	2300 to 2690	-	-	3.00
Isolation (dB)	-Low 698 to 960	25	46	-
	-Mid 1710 to 2170	13	16	-
Return Loss (dB)	2300 to 2690	8	13	-
Power Capacity(W)	2300 to 2690	-	-	1

Ta = +25+/-5°C

# TPX322690MT-7017C1

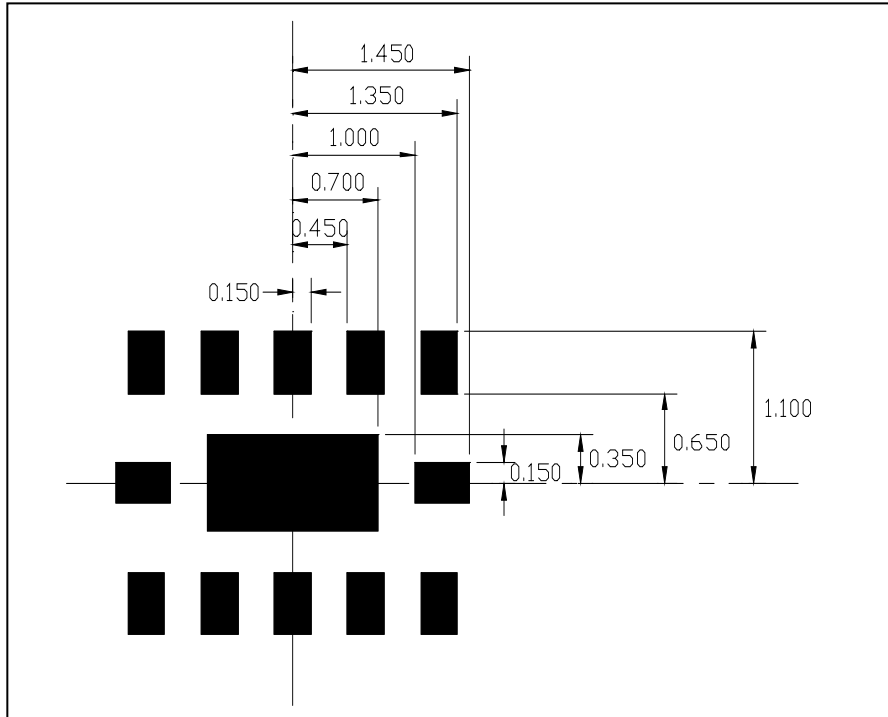
## FREQUENCY CHARACTERISTICS

( Measurement )



## TPX322690MT-7017C1

### RECOMMENDED LAND PATTERN

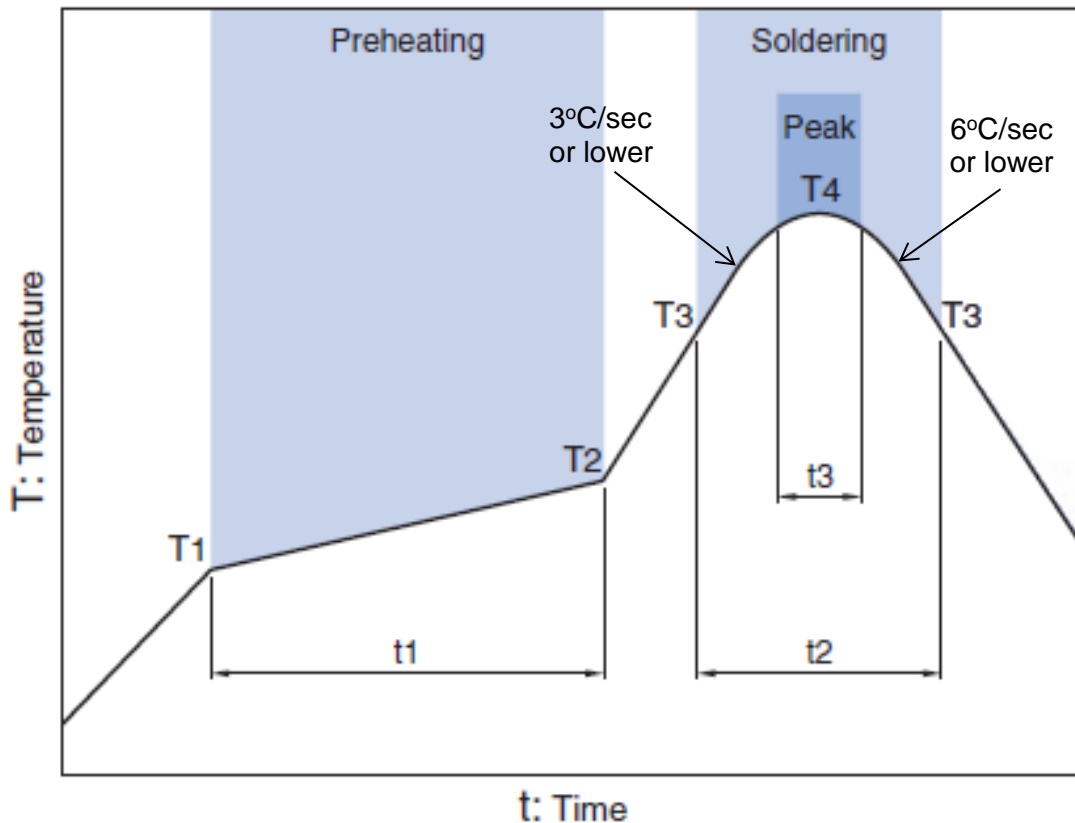


### ENVIRONMENT INFORMATION

RoHS Statement  
RoHS Compliance

## TPX322690MT-7017C1

### 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

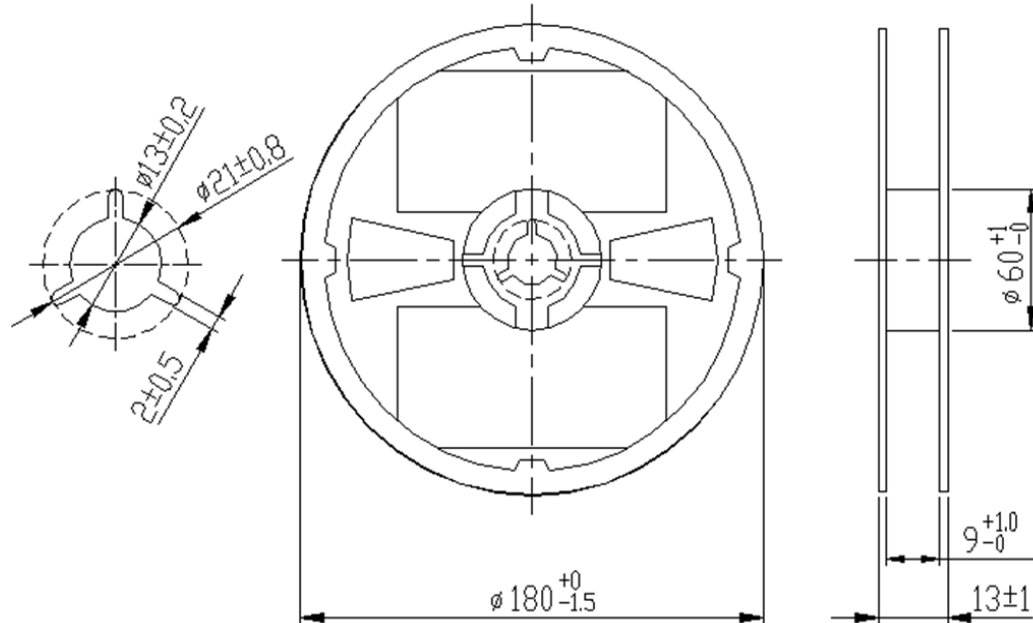
\* t3 : Time within 5°C of actual peak temperature

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)

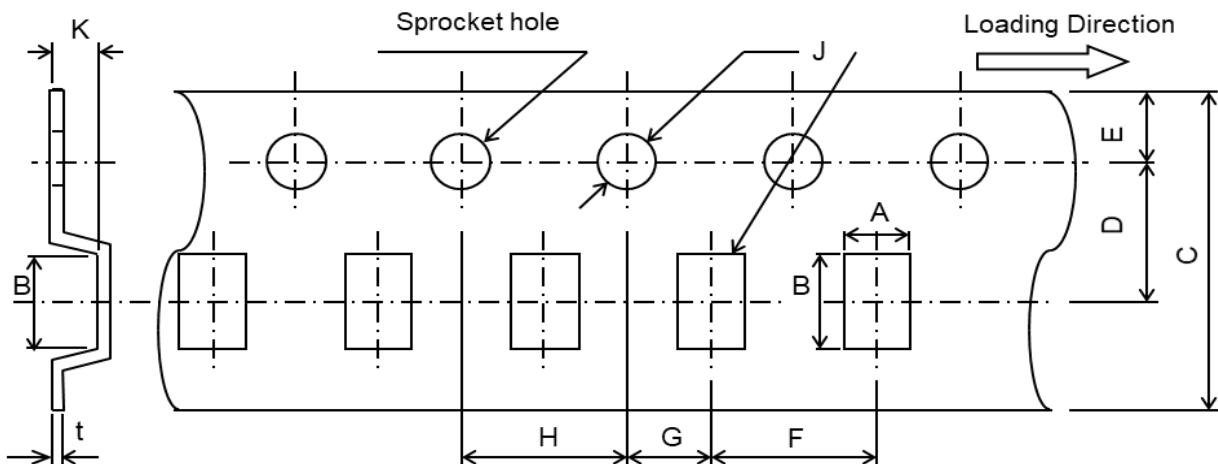
**TPX322690MT-7017C1****PACKAGING STYLE**

Reel Dimensions



Dimensions in mm

Carrier Tape



Dimensions (mm)

A	B	C	D	E	F	G	H	J	K	t
2.7	3.45	8.0	3.5	1.75	4.0	2.0	4.0	1.5	1.45	0.25
$\pm 0.05$	$\pm 0.05$	$+0.3/-0.1$	$\pm 0.05$	$\pm 0.1$	$\pm 0.1$	$\pm 0.05$	$\pm 0.1$	$+0.1/-0$	MAX	$\pm 0.05$

**STANDARD PACKAGE QUANTITY****( pieces/reel )**

2,000

## 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.