



Apr. 2016 Ver.4.0a  
TDK Corporation

## Multilayer Triplexer

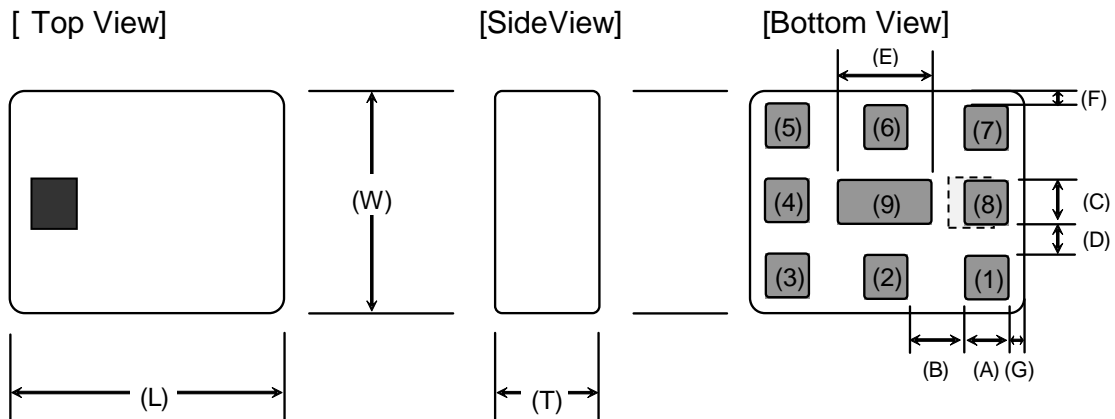
For 698-960MHz / 1452-2170MHz / 2500-2690MHz

TPX Series 2.5x2.0mm [EIA 1008] TYPE

P/N: **TPX252690MT-7007A1**

## TPX252690MT-7007A1

### ■ SHAPES AND DIMENSIONS



Dimensions (mm)

L	W	T	A	B	C	D	E	F	G
2.50	2.00	0.90	0.40	0.55	0.40	0.30	0.90	0.10	0.10
+/-0.10	+/-0.10	+/-0.10	+/-0.10	+/-0.10	+/-0.10	+/-0.10	+/-0.10	+/-0.10	+/-0.10

Terminal functions

(1)	High-Band Port
(2)	GND
(3)	Middle-Band Port
(4)	GND
(5)	Low-Band Port

(6)	GND
(7)	Common Port
(8)	GND
(9)	GND

### ■ TEMPERATURE RANGE

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

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### ■ ELECTRICAL CHARACTERISTICS

( Measurement )

#### Low-Band

Parameter	Frequency (MHz)	TDK Spec		
		Min.	Typ.	Max.
Insertion Loss (dB)	698 to 960	-	0.50	0.70
Insertion Loss (dB) (-40 to +85 °C)	698 to 960	-	-	0.85
VSWR	698 to 960	-	1.20	1.92
Attenuation (dB)	1710 to 2170	15	20.4	-
	2500 to 2690	15	28.7	-
Power capacity (W)		-	-	1.50

Ta = +25+/-5°C

#### Middle-Band

Parameter	Frequency (MHz)	TDK Spec		
		Min.	Typ.	Max.
Insertion Loss (dB)	1452 to 1496	-	2.16	-
	1710 to 2170	-	0.92	1.20
Insertion Loss (dB) (-40 to +85 °C)	1452 to 1496	-	-	-
	1710 to 2170	-	-	1.40
VSWR	1452 to 2170	-	2.69	-
	1710 to 2170	-	1.56	1.92
Attenuation (dB)	698 to 960	14	21.7	-
	2500 to 2690	10	14.3	-
Power capacity (W)		-	-	1.50

Ta = +25+/-5°C

#### High-Band

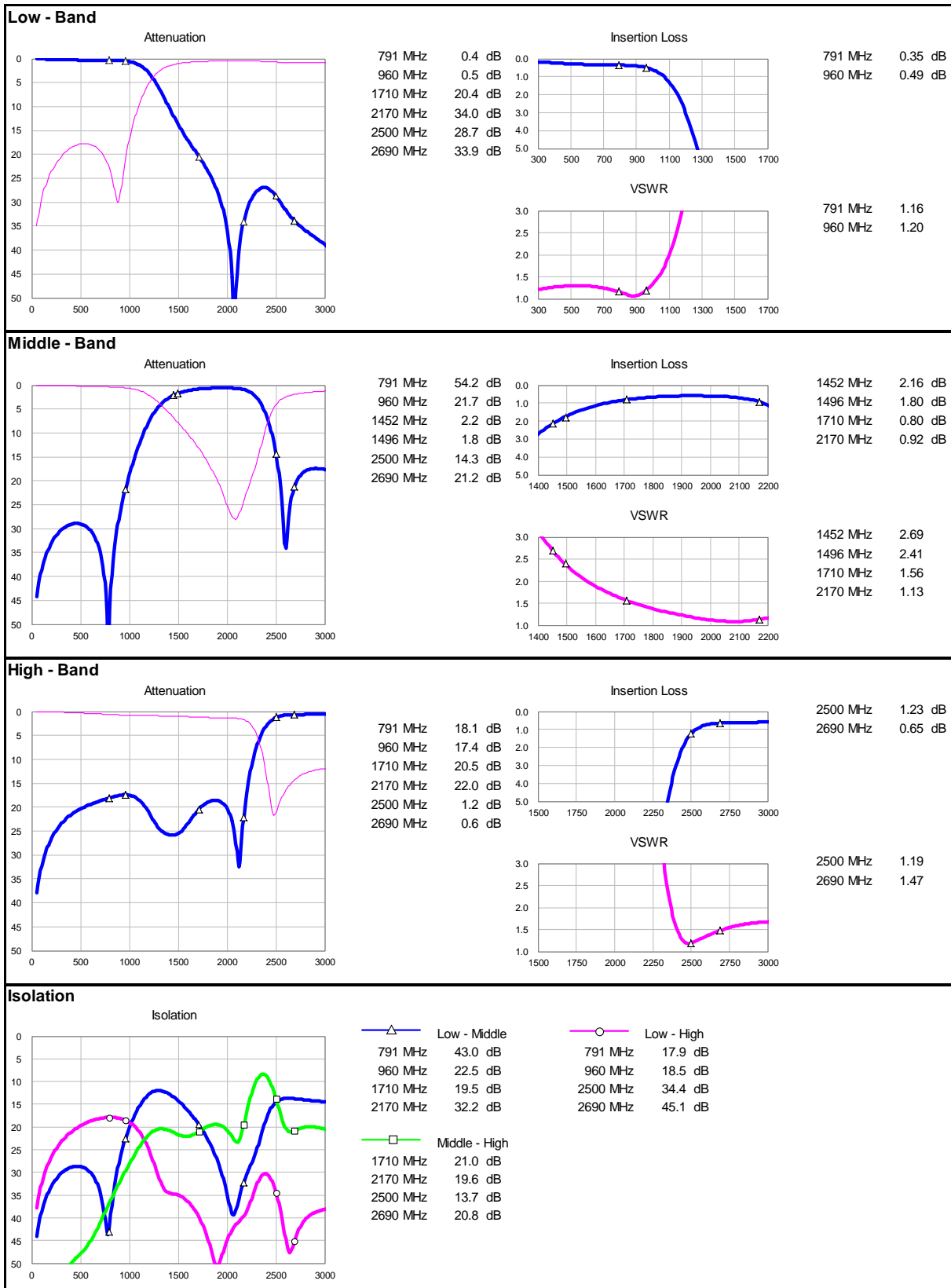
Parameter	Frequency (MHz)	TDK Spec		
		Min.	Typ.	Max.
Insertion Loss (dB)	2500 to 2690	-	1.23	1.80
Insertion Loss (dB) (-40 to +85 °C)	2500 to 2690	-	-	1.95
VSWR	2500 to 2690	-	1.47	1.92
Attenuation (dB)	698 to 960	14	17.4	-
	1710 to 2170	15	20.5	-
Power capacity (W)		-	-	1.50

Ta = +25+/-5°C

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## FREQUENCY CHARACTERISTICS

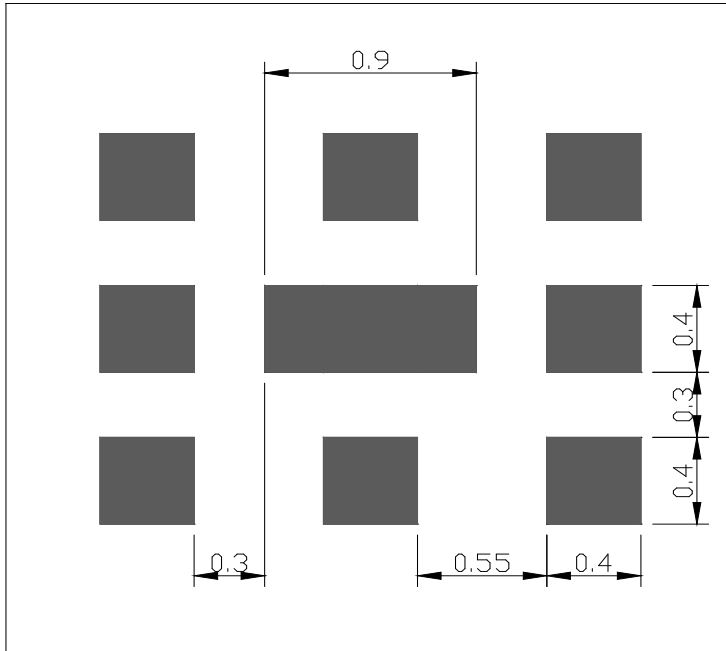
( Measurement )



All specifications are subject to change without notice.

## TPX252690MT-7007A1

### ■ RECOMMENDED LAND PATTERN

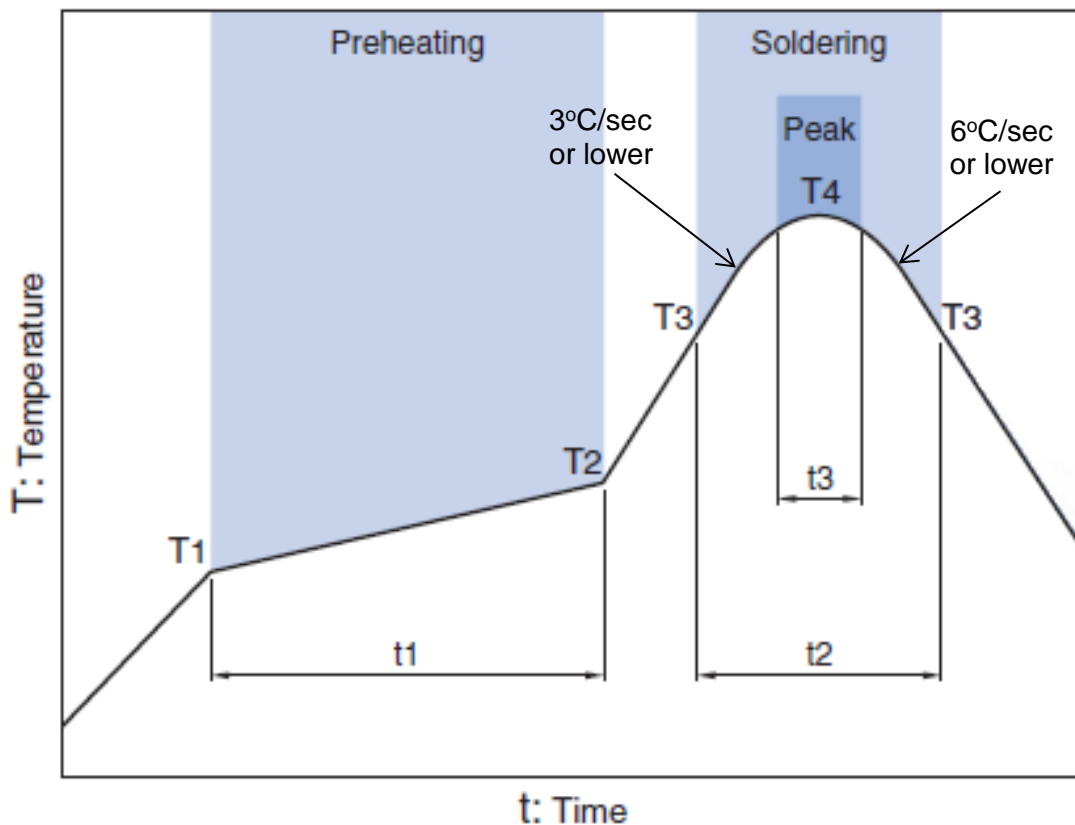


### ■ ENVIROMENT INFORMATION

RoHS Statement  
RoHS Compliance

## TPX252690MT-7007A1

### RECOMMENDED REFLOW PROFILE



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

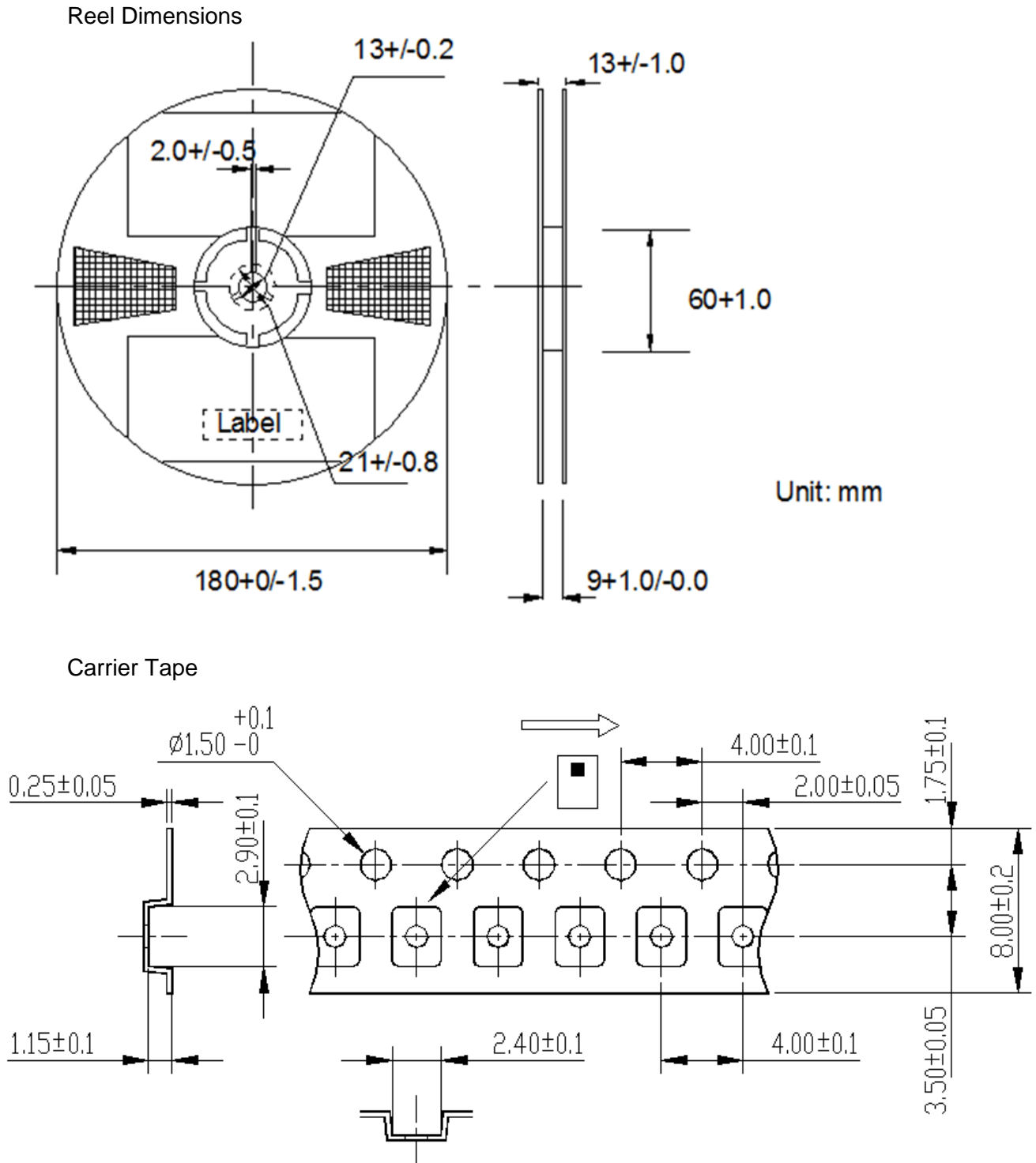
\* t3 : Time within 5°C of actual peak temperature

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)

## TPX252690MT-7007A1

### ■ PACKAGING STYLE



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.