

## SMD Duplexer SPECIFICATIONS

Part No.: TSDUP-725-780XW

Customer:XXXX

Date: Mar. 18, 2025

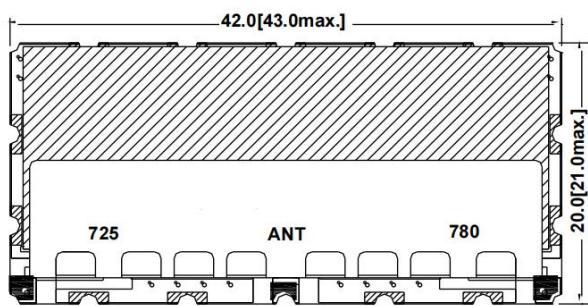
Written by	Checked by	Approval

### ELECTRICAL SPECIFICATIONS

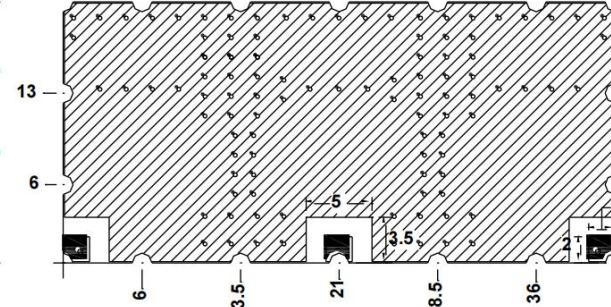
ITEM	ANT>>Low	ANT>>High	UNIT
1 Center freq[fo]	725.5	780.5	MHz
2 Bandwidth [BW]	fo ±22.5 [ 703.0~748.0 ]	fo ±22.5 [ 758.0~803.0 ]	min MHz
3 Insertion Loss in BW	3.5		dB max.
4 Ripple in BW	2.5		dB max.
5 Return Loss in BW	15.0		dBmin.
6 Attenuation (Absolute Value)	40 dBmin. @ [ 758.0~803.0 ]	40dBmin. @ [ 703.0~748.0 ]	MHz
7 Group Delay Variation	--		ns max
8 Input Power	3.0		W max
9 In/Out Impedance	50Ω		Ω
10 Operation Temperature Range	-40°C to +85°C		°C

### MECHANICAL SPECIFICATIONS

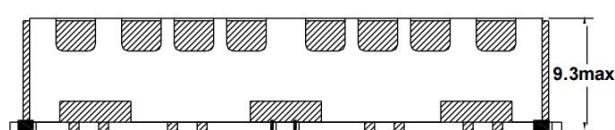
TOP VIEW



BOTTOM VIEW



SIDE VIEW



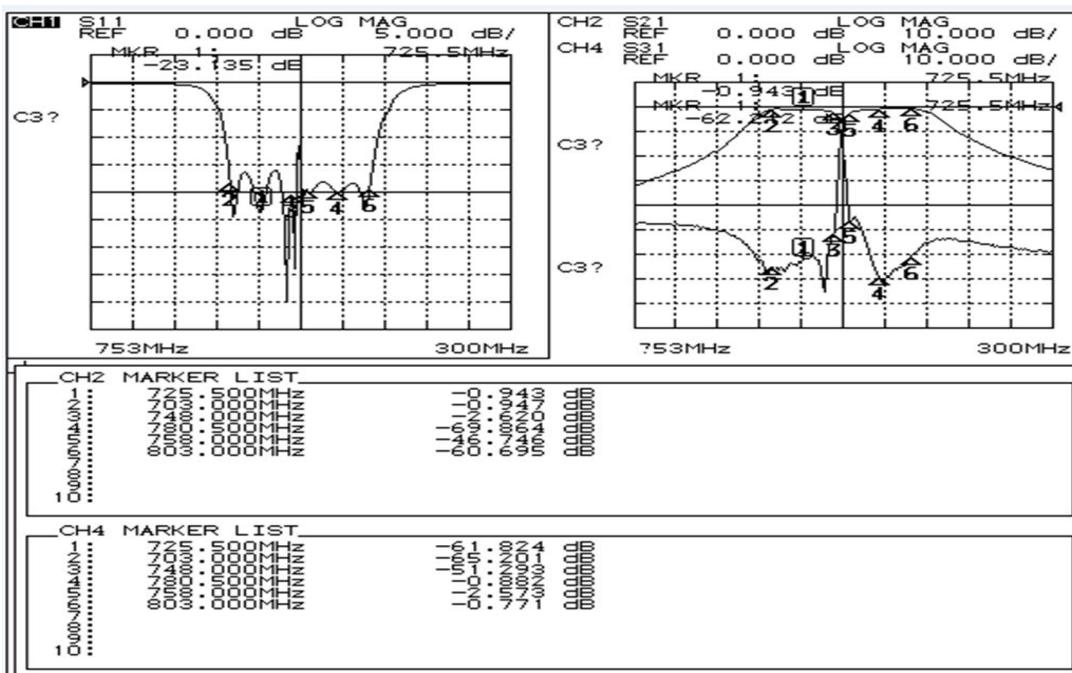
 I/O PORT

 GROUND

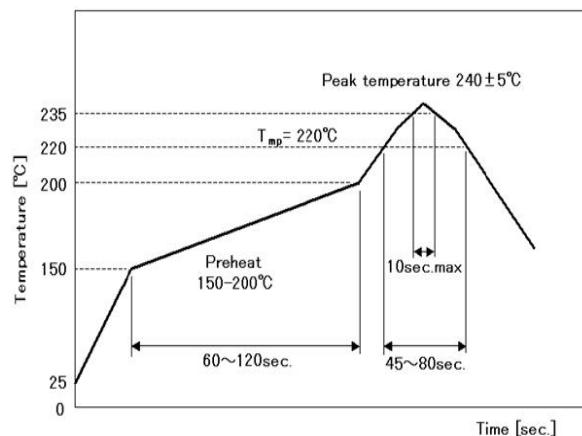
TOLERANCE : ±0.20

UNIT : mm

## PERFORMANCE



## SOLDERING CONDITIONS



### Notes:

1. Please ensure proper grounding for both the ground and I/O areas. To maintain good grounding when using the product, ensure the bottom area is well-soldered. Additionally, the side pins may require rework soldering after assembly.
2. SMT process is recommended for this product. The recommended reflow temperature curve is provided above. However, as different substrates and reflow soldering equipment vary, please confirm the actual temperature curve based on the specific substrate and equipment.
3. If manual soldering is required under special circumstances, the maximum soldering temperature should be  $275^\circ\text{C}$ , and manual soldering should not exceed 5s. Do not allow the soldering iron tip to directly touch the metal layer on the filter surface.
4. Use solder paste and solder wire with a melting point of  $180^\circ\text{C}$  or lower.
5. Avoid manual soldering unless absolutely necessary, as it can cause deformation of the filter shield. High temperatures may cause the metal layer on the filter surface to detach. Insufficient grounding area may negatively affect the filter's performance. Filters without PCB packaging must not be soldered manually.