

## SMD Filter SPECIFICATIONS

Part No.: TDRF2491P75B16XW

Customer: XXXX

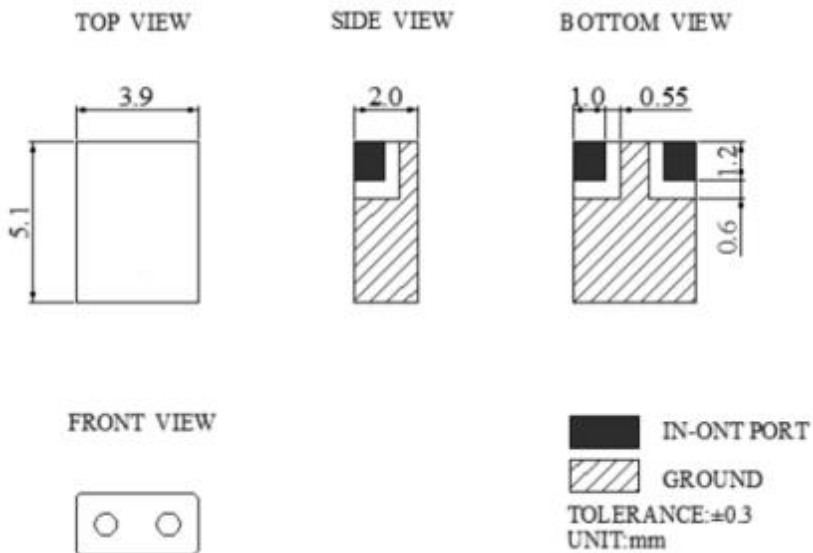
Date: Mar.17, 2025

Written by	Checked by	Approval

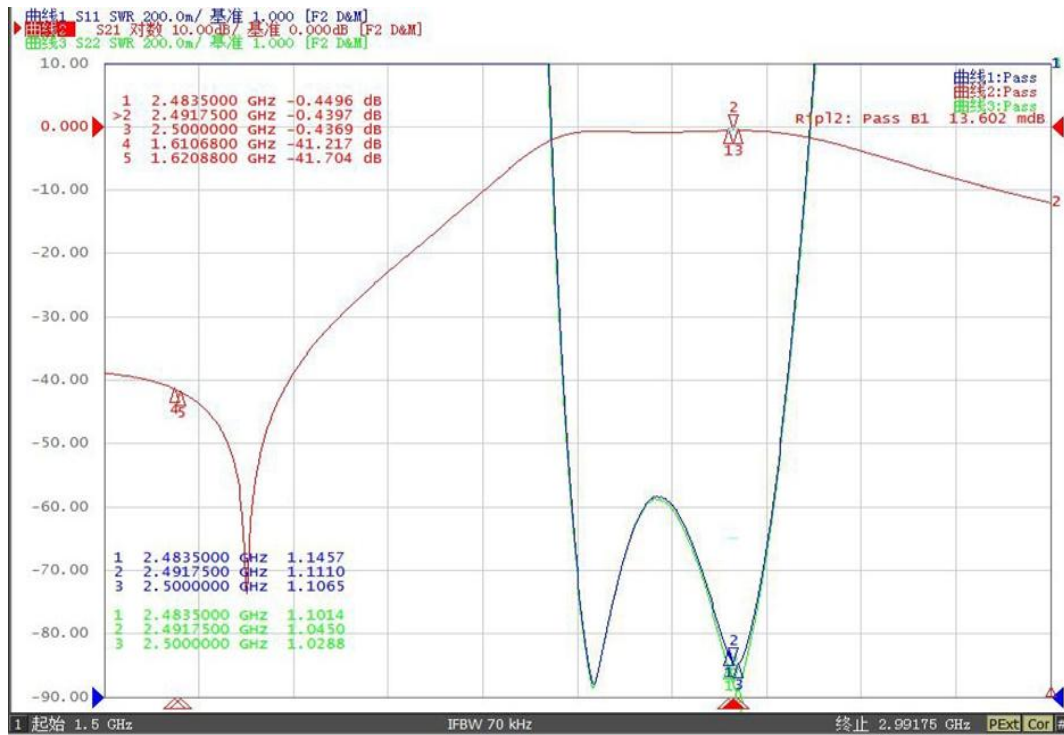
### ELECTRICAL SPECIFICATIONS

ITEM		SPEC	UNIT
1	Center freq [fo]	2491.75	MHz
2	Bandwidth [BW]	2483.5 ~ 2500	min MHz
3	Insertion Loss in BW	0.6 (in regular temp) 0.7 (in full temp)	dB max.
4	Ripple in BW	0.3 (in regular temp) 0.4 (in full temp)	dB max.
5	V S W R in BW	1.5 (in regular temp) 1.6 (in full temp)	dB
6	Attenuation (Absolute Value)	40.0 dB min. @ [ 1610.68 ~ 1620.88 ]	MHz
7	Input Power	2.0	W max
8	In/Out Impedance	50Ω	Ω
9	Operation Temperature Range	-40°C to +85°C	°C

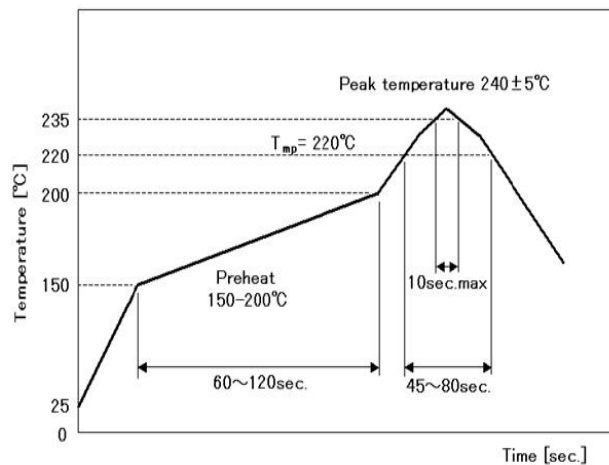
### MECHANICAL SPECIFICATIONS



## SIMULATION



## SOLDERING CONDITION



### 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.