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SMD Filter SPECIFICATIONS

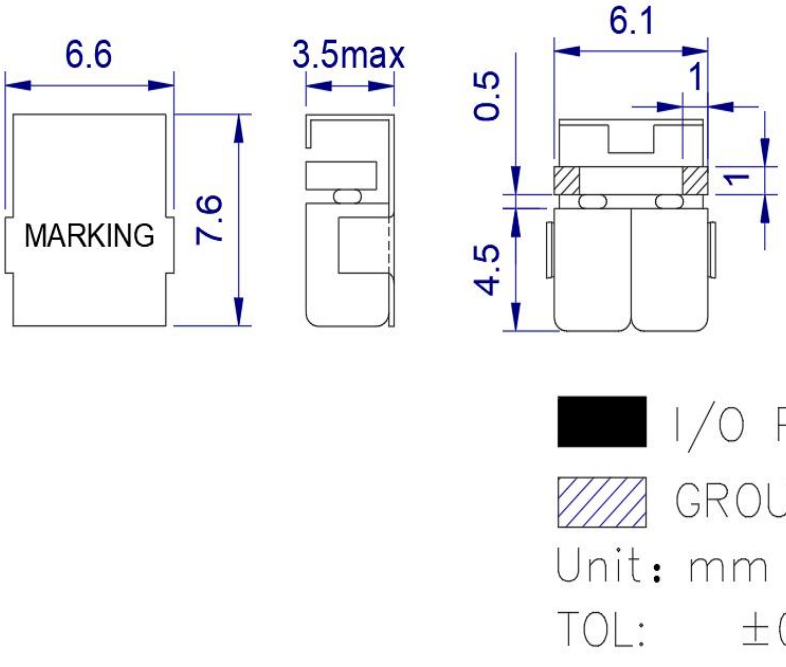
Part No.: TDRF2491P75B17XW
Customer: XXXX
Date: Feb. 23, 2025

Written by	Checked by	Approval

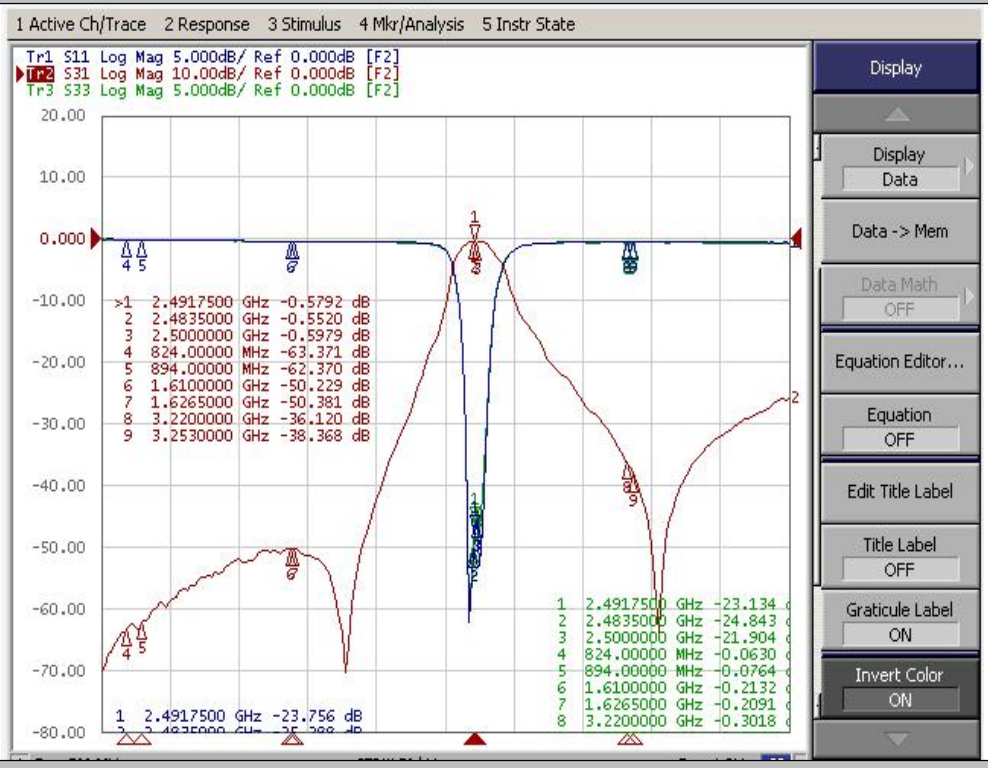
ELECTRICAL SPECIFICATIONS

ITEM		SPEC	UNIT
1	Center freq [fo]	2491.75	MHz
2	Bandwidth [BW]	fo ±8.25 [2483.5～2500.0]	min MHz
3	Insertion Loss in BW	0.6 (in reugular temp)	dB max.
4	Ripple in BW	0.4 (in reugular temp)	dB max.
5	Return Loss in BW	---	dB min.
6	V S W R in BW	1.5 (in reugular temp)	max.
7	Attenuation（Absolute Value）	55.0 dB min. @ [824.0 - 894.0] 45.0 dB min. @ [1610.0 - 1626.5] 20.0 dB min. @ [3222.0 - 3253.0] 28.0 dB min. @ [4830.0 - 4897.5]	MHz
8	Group Delay Variation	--	ns max
9	Input Power	1.0	W
10	In/Out Impedance	50Ω	Ω
11	Operation Temperature Range	-40℃ to +85℃	℃

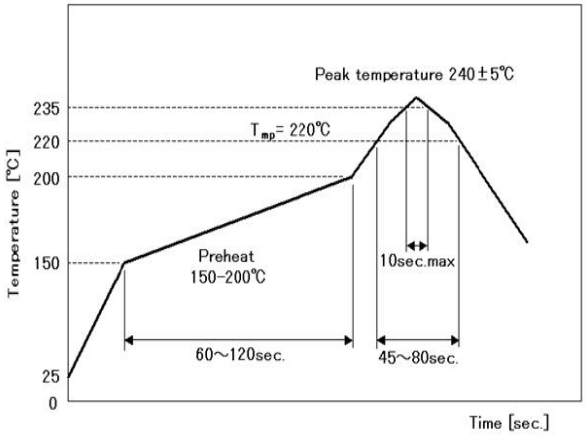
MECHANICAL SPECIFICATIONS



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°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°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.