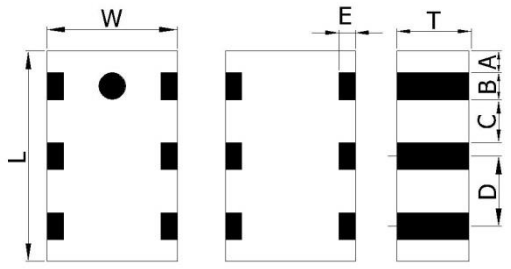
HIGH Frequency Multilayer Balanced Filter

RBB-2012-AE-TR

ELECTRICAL SPECIFICATION

SPECIFICATIONS		SPECIFICATIONS	UNIT
Frequency Range		2400 ~ 2500	MHz
VSWR (max)		2.0	--
Insertion Loss, Max	@ 25°	1.5	dB
	@ -40°C ~ +85°C	1.7	dB
Unbalanced Impedance		50	Ω
Balanced Impedance		Impedance matched to: Atmel AT86RF232, AT86RF233, ATMega256RFR2, ZigBit 256RFR2, ZigBit RF233, ZigBit RF233+FEM, Extension RF233, USB RF233	--
Phase Difference		180 ±10	°
Amplitude Difference, Max		2	dB
Attention, min	@ 4800 ~ 5000 MHz	20	dB
	@7200 ~ 7500 MHz	20	dB
Operating Temperature		-10 ~ +40	°C
Storage Temperature		-40 ~ +85	°C

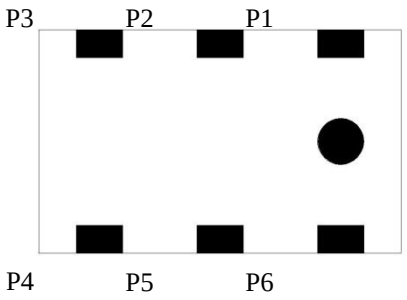
MECHANICAL SPECIFICATION



Unit: mm

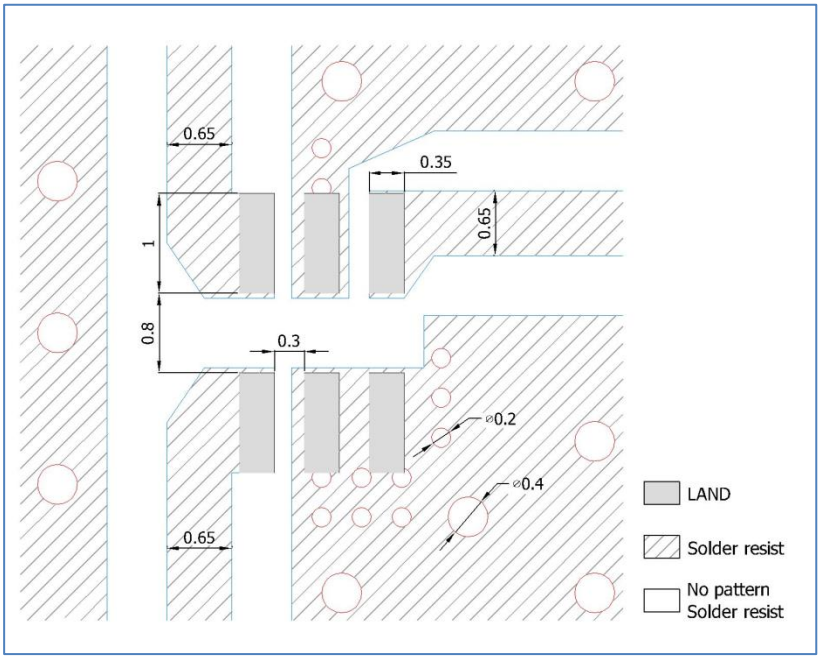
	L	W	T	A	B	C	D	E
Dimension	2.00±0.10	1.25±0.10	0.8±0.10	0.2±0.10	0.3±0.10	0.35±0.10	0.65±0.10	0.2±0.10

MECHANICAL SPECIFICATION (Continued)



PIN	
1	Unbalanced port
2	Ground
3	Balanced port
4	Balanced port
5	Ground
6	Ground

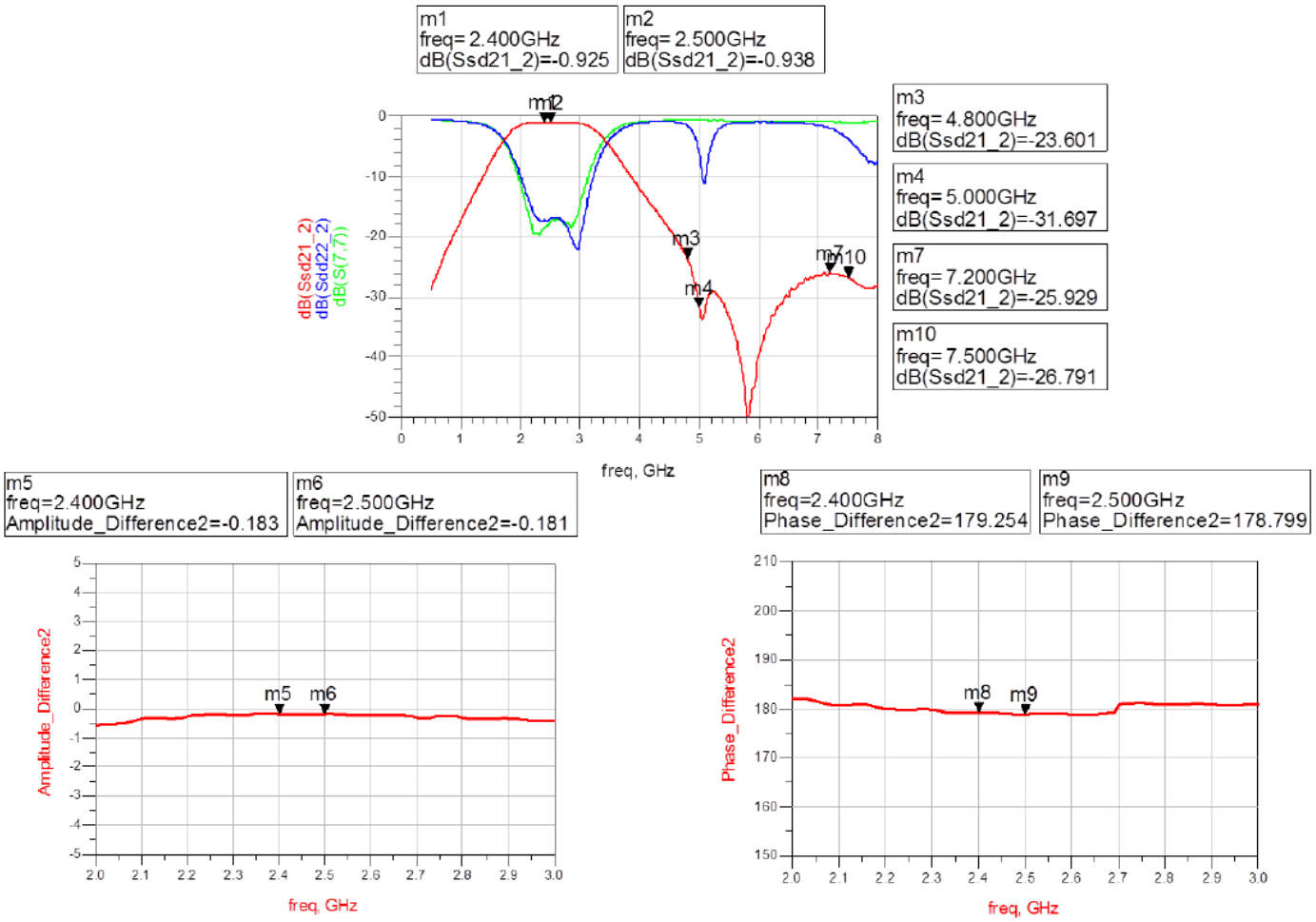
SOLDER LAND PATTERN



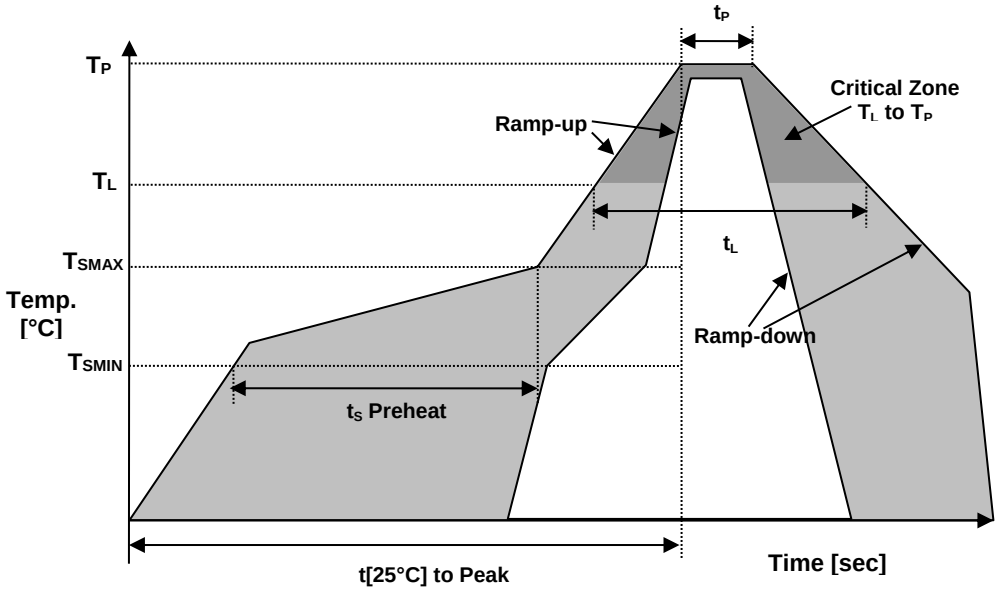
Unit : mm

Line width to be designed to match 50 Ω characteristic impedance, depending on PCB material and thickness.

ELECTRICAL PERFORMANCE



REFLOW PROFILE



Reflow profile		
Temperature Min Preheat	T_{SMIN}	150°C
Temperature Max Preheat	T_{SMAX}	200°C
Time (T_{SMIN} to T_{SMAX})	t_S	60-180 sec.
Temperature	T_L	217°C
Peak Temperature	T_P	250°C
Ramp-up rate	R_{UP}	3°C/sec max.
Ramp-down rate	R_{DOWN}	6°C/sec max.
Time within 5°C of Peak Temperature	t_P	10 sec.
Time t[25°C] to Peak Temperature	t[25°C] to Peak	480 sec.
Time	t_L	60-150 sec.

ENVIRONMENTAL

PARAMETER	VALUE
MOISTURE SENSITIVITY LEVEL	1
RoHS2	6/6 COMPLIANT & LEAD FREE
REACH-SVHC	COMPLIANT
HALOGEN-FREE	COMPLIANT
TERMINATION FINISH	Au

RoHS Compliant

March, 2017