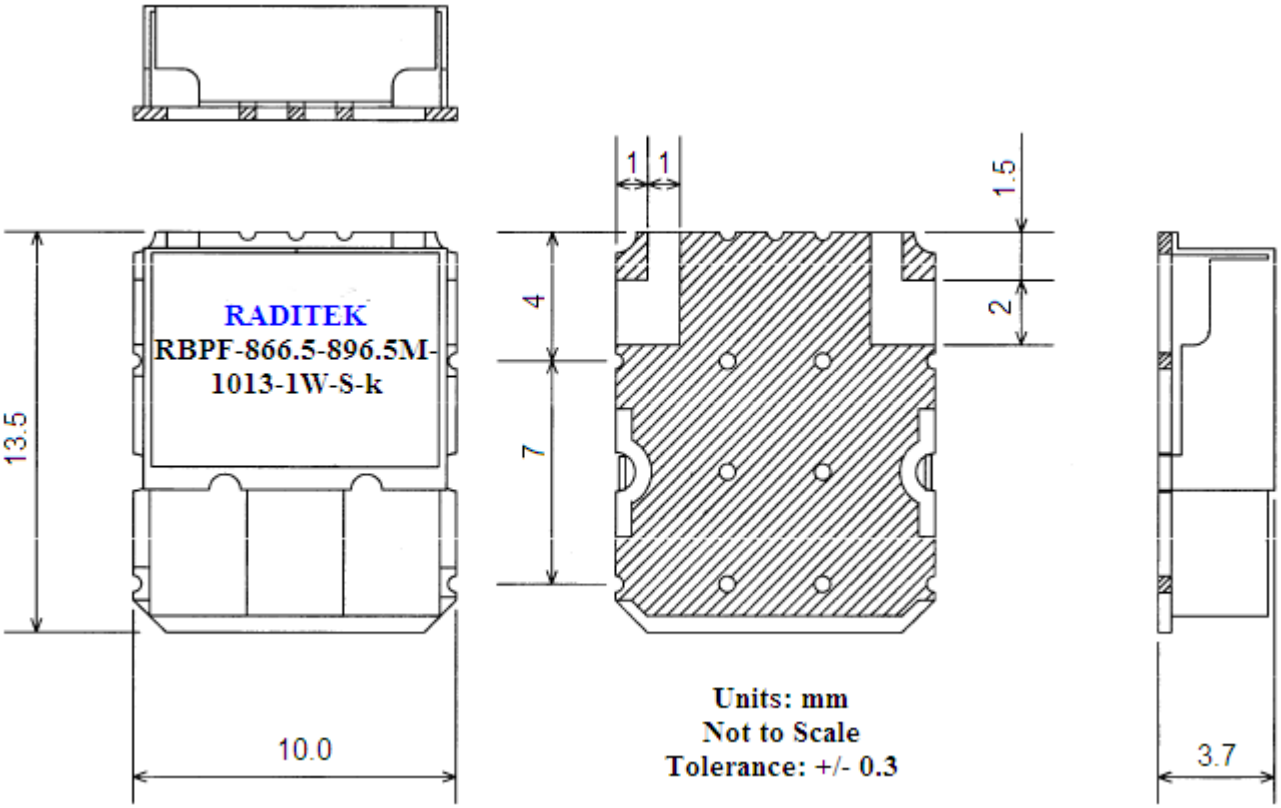
RADITEK INC.

Ceramic Band Pass Filter

code-k

866.5MHz to 896.5MHz, Model 1013, 1 Watt, Surface Mount

RBPF-866.5-896.5M-1013-1W-S-k



Specifications		Units
Center Frequency	881.5	MHz
Band Pass Width	866.5-896.5	MHz
Insertion Loss	1.7	dB Max
Ripple	0.2	dB Max
Return Loss	18	dB Min
Attenuation	7 @ 849MHz	dB Min
Permissible Input Power.	1	Watts Max
Operating Temp	-30 to +85	ºC
Storage Temp	-40 to +85	ºC
I/O Impedance	50	Ω
Size		mm

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1. ENVIRONMENTAL SPECIFICATIONS

1-1. TEST CONDITIONS

BASIC CONDITIONS :Temperature 20ºC, relative humidity 65% RH
STANDARD CONDITIONS : Temperature Range 5~35ºC
Humidity Range 45~85%
unless otherwise specified for the test and judgment

1-2. ENVIRONMENTAL PERFORMANCE

1-2-1. TEMPERATURE CHARACTERISTICS

TABLE 1 should be satisfied at temperatures ranging from –30ºC to +85ºC

1-2-2. HEAT RESISTANCE

Leave the product in the test bath at temperatures +85ºC ±2ºC for 72±2hours. Take it out leave it in a stationary state for 1 to 2 hours. Then it should satisfy the TABLE 1.

1-2-3. COLD RESISTANCE

Leave the product in the test bath at temperatures -40ºC ±5ºC for 72±2hours. Take it out leave it in a stationary state for 1 to 2 hours. Then it should satisfy the TABLE 1.

1-2-4. MOISTURE RESISTANCE

Leave the product in the test bath at temperatures -40ºC ±2ºC and humidity 90 to 95% for 48±2hours. Take it out leave it in a stationary state for 1 to 2 hours. Then it should satisfy the TABLE 1.

1-2-5. HEAT IMPACT RESISTANCE

Test the product at low temperature(-40ºC ±5ºC) and high temperature(+85ºC ±2ºC) for 30±2 min. each by 5 cycles, and leave it in a stationary state for 1 to 2 hours. Then it should satisfy the TABLE 1.

1-2-6. SOLDERABILITY

Leave it at temperatures shown in FIG.1 for specified length of time. Solder shall be sticking to more than 95% of the part.
Solder : Pb (37 to 38 %) / Sn (62 to 63 %)
Flux : RMA (9 to 11 %)

1-2-7. VIBRATION RESISTANCE

Test the product by vibration of full amplitude 1.5 mm at 5Hz ~ 55Hz and acceleration 49m/s$_2$ at 55 ~ 150 Hz by sweep 0.1 oct/min. for 2 hours each in the direction of x, y, z. Then it should satisfy the TABLE 1.

1-2-8. IMPACT RESISTANCE

Apply impact of maximum acceleration 200 m/s$_2$ and sine half-wave (working time 7~ 11m/s) to the product, 3 times each in six different directions. Then it should satisfy the TABLE 1.

1-2-9. SOLDERING HEAT RESISTANCE

Leave it at temperatures shown in FIG.2 for specified length of time. After two cycle of this operation, keep it in standard conditions for 1 to 2 hours. Then it should satisfy the TABLE 1.

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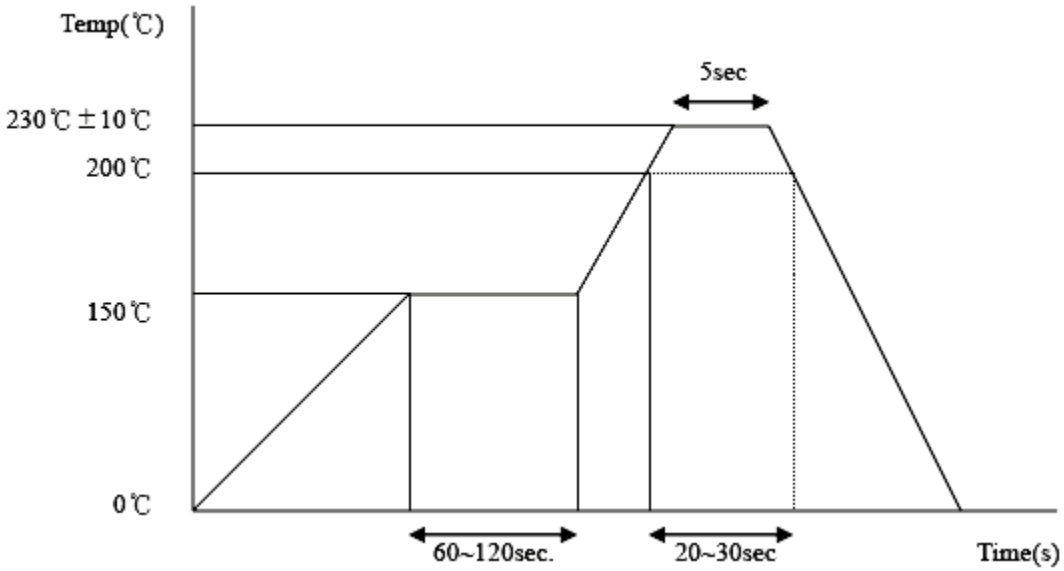
FIG.1 RECOMMENDED TEMPERATURE PROFILE



1-2-10. SHOCK RESISTANCE (DROP)

Install the product in the real unit dummy(159 g) and let it drop under the following conditions.
Then it should satisfy the TABLE 1.

- On p-tile : 150 cm. 6surfaces. 5 time each

MATERIALS

FIG.2

NO	Name	Composition Material
1	RESONATOR	DIELECTRIC MATERIAL
2	NUMBER of POLES	3POLE
3	IN/OUTPUTTERMINALS	C5 194 Ag PLATED
4	GROUND BASE	C5 194 Ag PLATED

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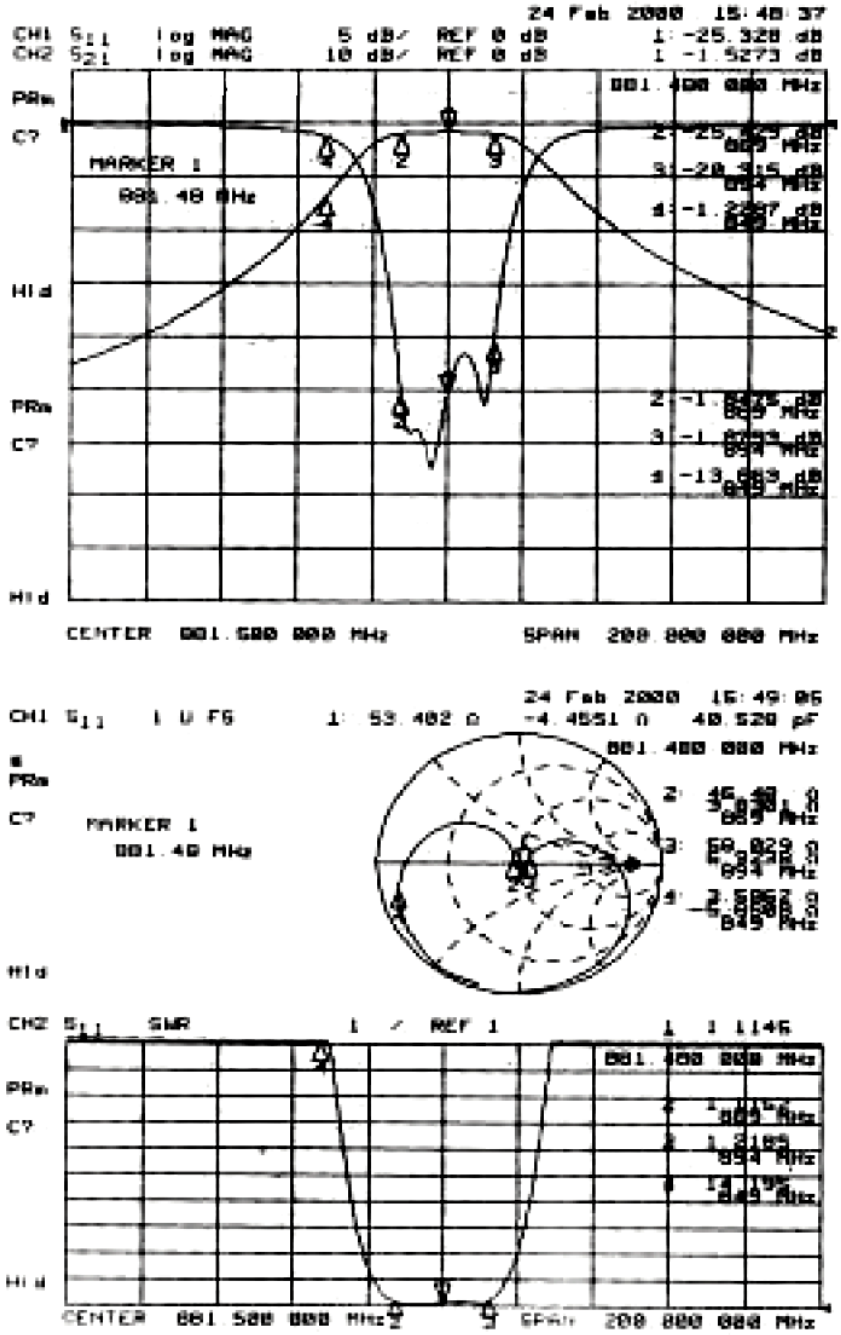
DIAGRAM



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