

Product features

High precision machining technology

Low temperature drift, high power.

Ceramic substrate, 50 Ω coplanar waveguide

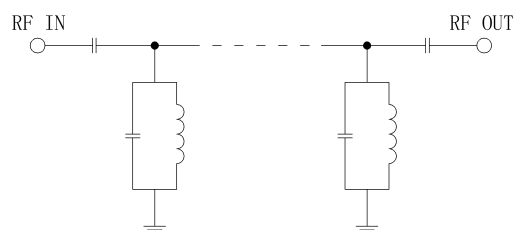
Gold wire bonding



Tech specifications

Items	Parameters	Units
Center Frequency	40.9	GHz
Bandwidth	37.0-44.8	GHz
Center loss	1.7	dB
Ripple	1.0	dB
VSWR	1.7:1	
Group delay ripple	0.4	ns
Rejection	40@DC-34.0GHz	dBc
Rejection	40@48.8-53.0GHz	dBc

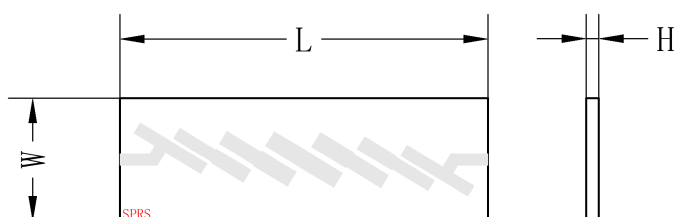
Schematic diagram



Other requirement (Design assurance)

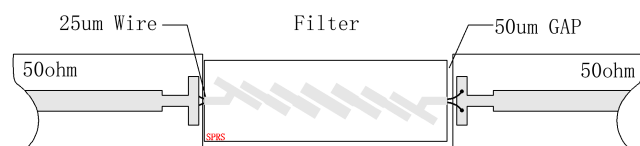
power	2W CW
Work Temp.	-55~+85°C
Storage Temp.	-55~+125°C
Outline size	L:6.5, W:1.8, h:0.26

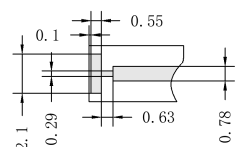
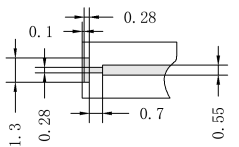
Outline drawing: Port centered



Note: The specifications and performance data contained in this data sheet are based on tests established by CMW.

Suggested PCB Layout



PCB Rogers5880, h: 0.254mm	PCB Rogers4350B, h: 0.254mm
	

Note

- 1: 0.1mm from the side wall, 1.75mm from the surface to the upper cover.
- 2: Suggest using conductive adhesive for bonding;
- 3: The chip should be installed on kovar alloy or molybdenum copper;
- 4: Suggest using a T-shaped structure for microstrip bonding.

Thin film filter STBP409-7R8-M342

Bandwidth 37.0-44.8GHz, Rejection 40@DC-34.0GHz, 40@48.8-53.0GHz

Typical test curve

