

Features

- Low insertion loss.
- Very good rejection
- Small size 2.0 mm x 1.25 mm
- Temperature stable
- LTCC construction

Applications

- Test and measurements
- Military applications
- Telecommunications and broadband wireless system

Electrical Specifications at 25° C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Passband	Insertion Loss	4200 - 4700	—	1.8	—
		4700 - 5500	—	0.9	1.5
		5500 - 16000	—	0.6	1.1
		16000 - 18000	—	1.0	—
Stopband	Return Loss	4200 - 18000	—	13	—
		DC - 2700	37	42	—
		2700 - 3000	24	34	—
		Freq. Cut-Off	3800	—	2.8

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)
10	73.86	0.09
100	62.00	0.10
500	49.55	0.20
1000	44.49	0.22
2700	53.73	0.37
3000	36.64	0.55
3320	20.40	0.96
3500	12.21	1.76
3780	3.11	8.68
3800	2.82	9.69
4000	1.46	20.70
4200	1.09	26.10
4700	0.75	19.61
5500	0.50	19.04
8000	0.29	18.55
10000	0.19	19.37
14000	0.16	25.06
16000	0.29	23.72
18000	0.71	24.59
20000	7.13	3.78

JY-HFCG-3800+



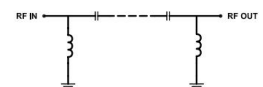
50Ω 4200 to 18000 MHz

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	3W max. at 25°C

Permanent damage may occur if any of these limits are exceeded.

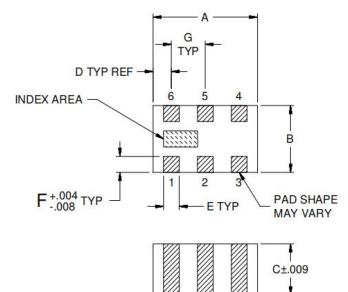
Electrical Schematic



Pin Connections

RF IN	1
RF OUT	3
GROUND	2,4,5,6

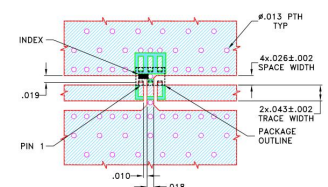
Outline Drawing



Outline Dimensions: Unit (mm)

A	2.00	B	1.25	C	0.95
D	0.35	E	0.30	F	0.30
G	0.65	wt	0.008g		

Suggested PCB Layout



- NOTES:
1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS (R04350B) WITH DIELECTRIC THICKNESS .0028-0.015, COPPER 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH AND GAP MAY NEED TO BE MODIFIED.
 2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER PATTERN WITH SOLDER (SOLDER MASK OVER BARE COPPER)
- DENOTES PCB COPPER PATTERN FREE OF SOLDERMASK