

Isolator, 27 to 47.5 GHz, 1, 2, 3 or 4 GHz Bandwidth **RADI-F1-F2-MS-0.5WR**

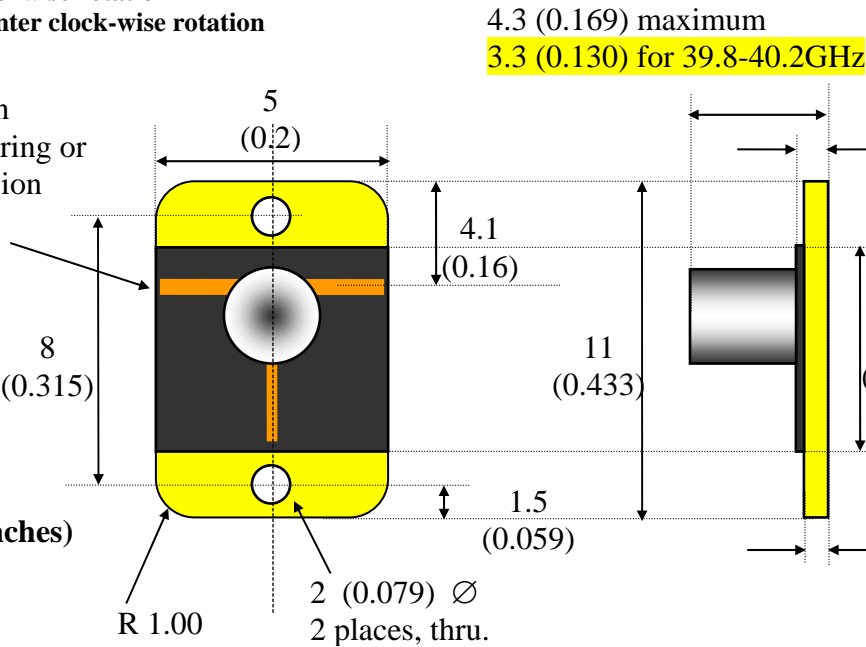
“R” denotes clockwise rotation

“L” denotes counter clock-wise rotation

Gold metalization suitable for soldering or thermo-compression bonding.

Tab width
0.17mm wide
0.14 (37-40GHz)

Not to scale
Units: mm (Inches)
Tolerance:
.XX ±0.008
.XXX ±0.004



Thickness for frequency:
1.25 28 to 34GHz
1.20 31 to 47.5GHz



1.27 (0.050")
1.00 (0.039) special

Do not heat above 130°C
Max temperature during welding process +350°C
@ 25m sec

Isolator is bonded onto a metal carrier

Humidity 5-95% non condensing

Specifications:	←-----27-47.5 GHz-----→						Units
	0.5	1.0	1.5	2.0	3.0	4.0	
Bandwidth (F2-F1)	0.5	1.0	1.5	2.0	3.0	4.0	GHz
Insertion loss	0.8	0.9	0.9	1.0	1.1	1.3	dB (max)
Isolation	20	20	20	20	20	18	dB (Min)
VSWR	1.3:1	1.3:1	1.3:1	1.35:1	1.35:1	1.35:1	
Return loss	18	17.7	17.7	17.7	17.7	16.7	dB
Rated power-Forward	1.0	1.0	3	1.0	3	1.0	Watts (Max)
Rated power-Reverse	0.5	0.5	1, 3	0.5	1, 3	0.5	Watts (Max)
Operating Temperature	-40 to 75	-40 to 75	-40 to 75	-40 to 75	-40 to 75	-40 to 75	°C
Storage Temperature	-40 to 85	-40 to 85	-40 to 85	-40 to 85	-40 to 85	-40 to 85	°C
	b	b	b	b	b	b	

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Specifications:							Units
Frequency	27-30	27.0-31.0	27.5-28.1	27.5-30.0			GHz
Insertion loss	1.1	1.0	0.9	1.1			dB (max)
Isolation	20	18	26	20			dB (min)
VSWR	1.35:1	1.35:1	1.25:1	1.35:1			dB
Return loss	17.7	16.6	19	17.7			
Rated power- Forward	1	1.0	1.0	3			Watts (max)
Rated power- Reverse	1	0.5	0.5	0.5			Watts (max)
Operating Temperature	-40 to 75	-40 to 75	-40 to 75	-40 to 75			°C
Storage Temperature	-40 to 85	-40 to 85	-40 to 85	-40 to 85			°C
	p	b 07-06-05	b11-29-06	b			

Specifications:							Units
Frequency	28-30	28-32	28-32	29-30	29.0-31.0	29.5-31.5	GHz
Insertion loss	1.0	1.3	1.1	1.1	1.0	1.0	dB (max)
Isolation	20	18	19	20	20	20	dB (min)
VSWR	1.35:1	1.35	1.3	13	1.35:1	1.35:1	dB
Return loss	16.5	16.5	17.7	17.7	16.6	16.6	
Rated power- Forward	1.0	1.0		2.0	2.0	2.0	Watts (max)
Rated power- Reverse	0.5	0.25, 1.0	0.25	0.5	0.5	0.5	Watts (max)
Operating Temperature	-40 to 75	-40 to 75	-40 to 75	-40 to 75	-40 to 75	-40 to 75	°C
Storage Temperature	-40 to 85		-40 to 85	-40 to 85	-40 to 85	-40 to 85	°C
	e 11-15-06	e 11-13-08	Size: 5x11x3.3mm B 11-18-08	p			

Specifications:							Units
Frequency	30.0-31.0	31-34	31.8-32.5	31.5-32.5	31.8-33.4	32-34	GHz
Insertion loss	0.8	1.1	0.8	0.9	1.0	1.0	dB (max)
Isolation	20	20	20	20	20	20	dB (min)
VSWR	1.3:1	1.35:1	1.3:1	1.3	1.3:1	1.3:1	dB
Return loss	17.7	17.7	17.7	17.7	17.7	17.7	
Rated power- Forward	1.0	3	1.0	1	1.0	1.0	Watts (max)
Rated power- Reverse		1	0.2	0.5	0.5	0.5	Watts (max)
Operating Temperature	-40 to 75	-40 to 75	-40 to 75	-40 to 75	-40 to 75	-40 to 75	°C
Storage Temperature	-40 to 85	-40 to 85	-40 to 85	-40 to 85	-40 to 85	-40 to 85	°C
	b	b	p	e 6-18-07		b	

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Specifications:							Units
Frequency	33-35	33-35	33-35		33.5-33.7	33.5-34.5	GHz
Insertion loss	0.9	0.9	1.1		0.9	0.9	dB (max)
Isolation	23	21	18		20	20	dB (min)
VSWR	1.30	1.30	1.35		1.25	1.35:1	dB
Return loss	19	19	16.6		19	16.6	
Rated power- Forward	1.0	1.0	1.0		1.0	1.0	Watts (max)
Rated power- Reverse	1.0	1.0	1.0		1.0	0.5	Watts (max)
Operating Temperature	25	-10 to 50	-40 to 70		-40 to 75	-40 to 75	°C
Storage Temperature	-40 to 85	-40 to 85	-40 to 85		-40 to 85	-40 to 85	°C
	b 7/15/10	b 7/15/10	b 7/15/10		e 6-22-06	e 1-11-05	

Specifications:							Units
Frequency	34.0-35.0	34.35-34.65	34-36	35-37	35.4-35.6	35.48-35.52	GHz
Insertion loss	0.9	0.9	1.0	1.0	0.9	0.8	dB (max)
Isolation	20	19	20	20	20	20	dB (min)
VSWR	1.3	1.35	1.3:1	1.3	1.3	1.3	dB
Return loss			17.7				
Rated power- Forward	1	5	3.0	3	1	3	Watts (max)
Rated power- Reverse	0.5	4	0.5	0.5	0.5	1	Watts (max)
Operating Temperature	-40 to 75	-30 to +50	-40 to 75	-40 to 75	-40 to 75	-40 to 75	°C
Storage Temperature	-40 to 85	-30 to +65	-40 to 85	-40 to 85	-40 to 85	-40 to 85	°C
	e 6-18-07	e	e	p	p		

Specifications:							Units
Frequency	37.0-38.6	37.0-40.0	39.2-43.2	39.8-40.2	44-45	46.5-47.5	GHz
Insertion loss	0.9	1.1	1.1	1.1	1.3	1.0/1.2	dB (max)
Isolation	20	20	20	20	19	20	dB (min)
VSWR	1.3:1	1.35:1	1.3:1	1.30	1.35:1	1.3	dB
Return loss	17.7		17.7		16.7	17.7	
Rated power- Forward	3	1.0	1.0	1	4	1.0	Watts (max)
Rated power- Reverse	1, 3	0.5	0.5	1	2	0.5	Watts (max)
Operating Temperature	-40 to 75	-40 to 75	-40 to 75	-30 to +60	-40 to 75	-40 to 75	°C
Storage Temperature	-40 to 85	-40 to 85	-40 to 85	-40 to 85	-40 to 85	-40 to 85	°C
		e		Size: 5x11x3.3mm b, 12/05/10			

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Extended Temperature range

At 80 °C, add 0.1 dB to Insertion Loss, and subtract 1.0 dB from Isolation
At 90C °C, add 0.3 dB to Insertion Loss, and subtract 4.0 dB from Isolation
At 100C °C, add 0.4 dB to Insertion Loss, and subtract 5.0 dB from Isolation
Higher temperature parts with better specs are available