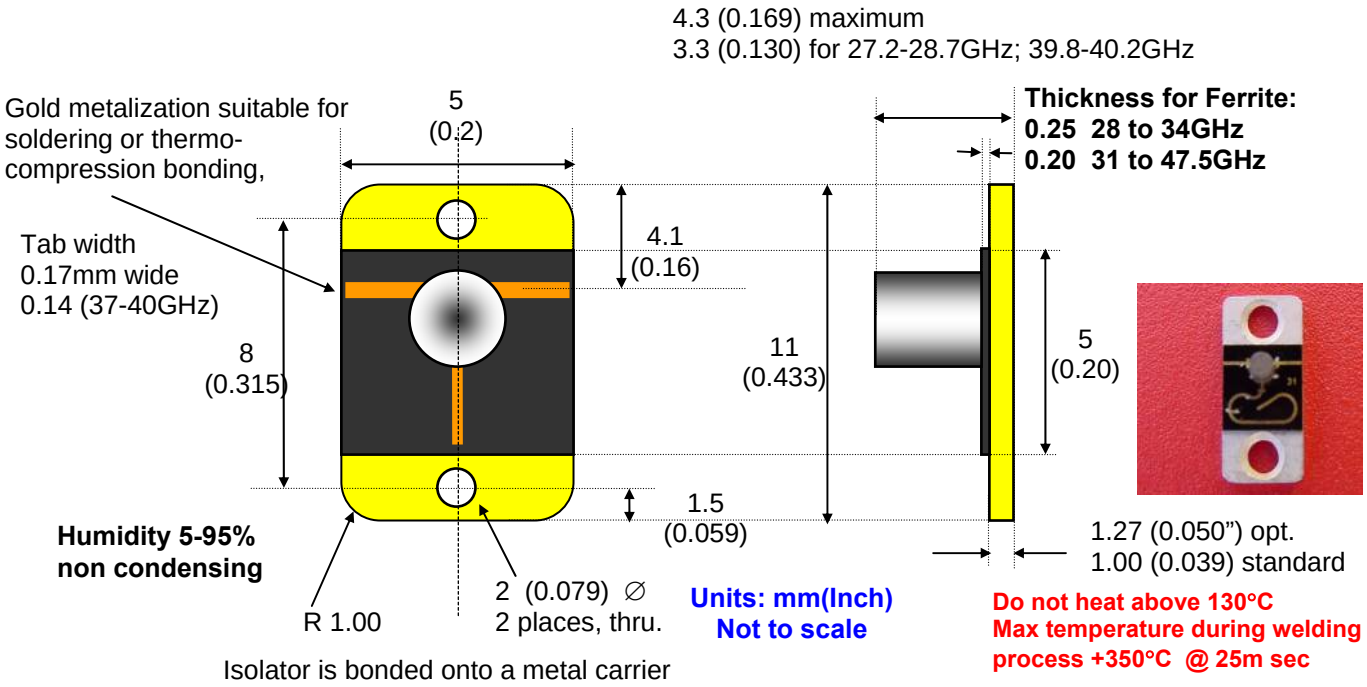
RADITEK INC.

RoHS COMPLIANT
code -b, -e

Isolator, 27 to 47.5 GHz,
1, 2, 3 or 4 GHz Bandwidth, 0.5, 1 or 3 Watts



Isolator is bonded onto a metal carrier

Direction of RF:		
R	Default	▶
L		◀

Order Examples: RADI-27-30-MS-1WR
I=ISOLATOR

Tolerance Table Metric (inch)
(unless otherwise stated):
Hole diameter +/- 0.1mm, (+/- 0.004")
Dimensions (w*l*h) +/- 0.3 mm, (+/- 0.015")
Dimensions (Microstrip pad, Stripline Tab, +/- 0.1mm, (+/- 0.04")
Dimensions (hole position) +/- 0.1mm, (+/- 0.04")
Machined surfaces
Flatness 0.025/mm, (0.001/ inch)
Bend radius 0.8mm, (0.031" or 1/32")

Specifications:	◀----------27-47.5 GHz----------▶						Units
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 Return loss	130:1 17.690	130:1 17.690	130:1 17.690	1.35:1 16.540	1.35:1 16.540	1.35:1 16.540	 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	^{o}C
Storage Temperature	-40 to 85	-40 to 85	-40 to 85	-40 to 85	-40 to 85	-40 to 85	^{o}C
	b	b	b	b	b	b	

WORLD HQ: 1702L Meridian Ave. Suite 127, San Jose, Ca 95125, U.S.A.
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Specifications:

Frequency MHz	Insertion loss dB (max)	Isolation dB (min)	VSWR / Return Loss	Reverse Power Watts	Forward Power Watts	Operating Temp °C	Storage Temp °C	Notes
27-30	1.1	20	1.35:1 16.540	1	1	-40 to 75	-40 to +85	p
27-31	1.0	18	1.35:1 16.540	0.5	1	-40 to +75	-40 to +85	b 07-06-05
27.2-28.7	1.0	20	1.35:1 16.540	0.5	0.5	-10 to +60	-40 to +85	b
27.5-28.1	0.9	26	1.25:1 19.085	0.5	1	-40 to +75	-40 to +85	b11-29-06
27.5-30.0	1.1	20	1.35:1 16.540	0.5	3	-40 to +75	-40 to +85	b
28-30	1.0	20	1.35:1 16.540	0.5	1	-40 to +75	-40 to +85	e 11-15-06
28-32	1.3	18	1.35:1 16.540	0.25, 1.0	1	-40 to +75	-40 to +85	e 11-13-08
28-32	1.0	20	1.35:1 16.540	0.25	1	-40 to +75	-40 to +85	Size: 5x11x3.3mm b 1/28/13
29-30	1.1	20	130:1 17.690	0.5	2	-40 to +75	-40 to +85	p
29-31	1.0	20	1.35:1 16.540	0.5	2	-40 to +75	-40 to +85	
29.5-31.5	1.0	20	1.35:1 16.540	0.5	2	-40 to +75	-40 to +85	
30-31	0.8	20	130:1 17.690	0.2, 0.5	1	-40 to +75	-40 to +85	
31-34	1.1	20	1.35:1 16.540	1	3	-40 to +75	-40 to +85	b
31.5-32.5	0.9	20	130:1 17.690	0.5	1	-40 to +75	-40 to +85	e 6-18-07
31.8-33.4	1.0	20	1.30:1 17.690	0.5	1	-40 to +75	-40 to +85	
31.8-32.5	0.8	20	1.30:1 17.690	0.2	1	-40 to +75	-40 to +85	p
32-34	1.0	20	1.30:1 17.690	0.5	1	-40 to +75	-40 to +85	b
33-35	0.9	23	1.30:1 17.690	1	1	25	-40 to +85	b 7/15/10
33-35	0.9	21	1.30:1 17.690	1	1	-10 to +50	-40 to +85	b 7/15/10
33-35	1.1	18	1.35:1 16.540	1	1	-40 to +70	-40 to +85	b 7/15/10

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Frequency MHz	Insertion loss dB (max)	Isolation dB (min)	VSWR / Return Loss	Reverse Power Watts	Forward Power Watts	Operating Temp °C	Storage Temp °C	Notes
33.5-33.7	0.9	20	1.25:1 19.085	1	1	-40 to +70	-40 to +85	e 6-22-06
33.5-34.5	0.9	20	1.35:1 16.540	0.5	1	-40 to +70	-40 to +85	e 1-11-05
34-35	0.9	20	1.30:1 17.690	0.5	1	-40 to +75	-40 to +85	e 6-18-07
34.35-34.65	0.9	19	1.35:1 16.540	4	5	-30 to +50	-30 to +65	e
34-36	1.0	20	1.30:1 17.690	0.5	3	-40 to +75	-40 to +85	e
35-37	1.0	20	1.30:1 17.690	0.5	3	-40 to +75	-40 to +85	p
35.4-35.6	0.9	20	1.30:1 17.690	0.5	1	-40 to +75	-40 to +85	p
35.48-35.52	0.8	20	1.30:1 17.690	1	3	-40 to +75	-40 to +85	
37.0-38.6	0.9	20	1.30:1 17.690	1	3	-40 to +75	-40 to +85	
37.0-40.0	1.1	20	1.35:1 16.540	0.5	1	-40 to +75	-40 to +85	e
39.2-43.2	1.1	20	1.30:1 17.690	0.5	1	-40 to +75	-40 to +85	
39.8-40.2	1.1	20	1.30:1 17.690	1	1	-30 to +66	-4 to +8	Size: 5x11x3.3mm b, 12/05/10
44-45	1.3	19	1.35:1 16.540	2	4	-40 to +75	-40 to +85	
46.5-47.5	1.0/1.2	20	1.30:1 17.690	0.5	1		-40 to +85	

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

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