RADITEK INC.

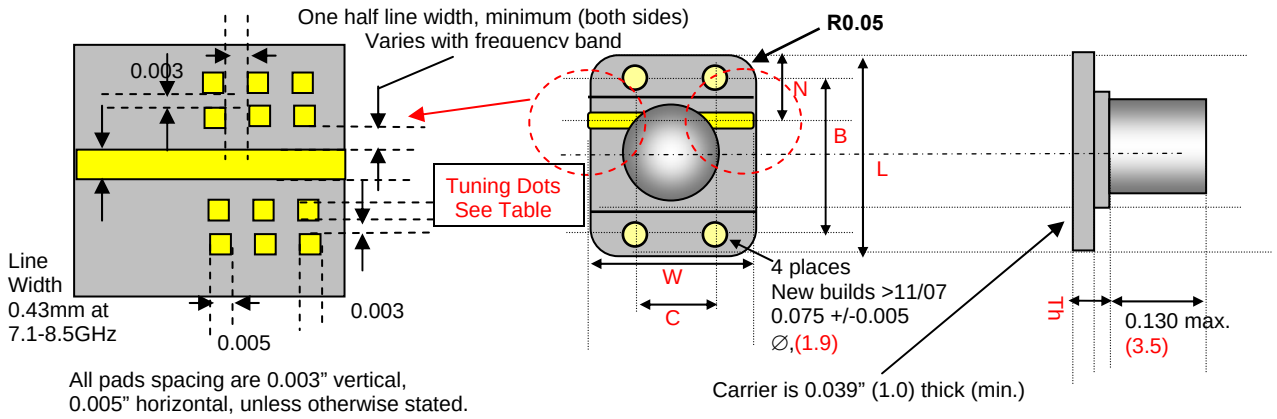
RoHS COMPLIANT

code-b

Isolators: Microstrip Substrate on special carrier

RADI-FLOW-FHIGH-MSSC- Rev Pwr –Direction(R default)

5W reverse power maximum due load size and hole spacing



Units: Inch (mm)
Not to scale

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")

Direction of RF:	
R	Default ▶
L	◀

Order Examples: RADI-7.1-8.5-MSSC-4WR-M2

Specifications over full operating temperature (-40 to +70 °C)
Survives, non-operating 130°C for up to 2 hrs.
Carrier thickness must be a minimum of 1mm, 0.039" thick to avoid cracking the substrate when bolting unit down. note tab height is the over riding measure, carrier and substrate thickness to change as necessary to meet this
Metalization details: 2 μm thin film Gold on 4μm Copper,

size	RADI/C:-(GHz)-MSSC	Ins loss dB	Isol dB	VSWR	Pwr W* Fwd	Pwr W* Rev	Tuning Dots y/n	Customer number: Notes
bc1	6.9-8.1	0.6 0.7	18 17	1.30:1 1.35:1	1	1	y	room -10 to +60
bc1	7.1-8.5	0.5	20	1.35:1	10	4	y	-40 to +85°C
bc2	7.1-8.5	0.5 0.6	20 18	1.35:1 1.35:1	10	4	y	-40 to +70°C -40 to +85°C 700-19812-0001
bc3	13.75-14.50	0.6	20	1.25:1	10	2		-10 to +70 Ferrite substrate 0.5mm. Total height 3.8mm
ab1	10.5-12	0.6	20	1.35:1	2	0.2	y	(b 2-14-05)
	10-12	0.6	20	1.35:1	2	0.2	y	383-002 (e 2-8-05) // 700-12262-002

WORLD HQ: 1702L Meridian Ave. Suite 127, San Jose, Ca 95125, U.S.A.
Tel: (408) 266-7404 FAX: (408) 266-4483
WEB: www.raditek.com E-mail: sales@raditek.com

Isolators: Microstrip Substrate on special carrier

RADI-FLOW-FHIGH-MSSC- Rev Pwr –Direction(R default)

5W reverse power maximum due load size and hole spacing

size	RADI/C:-(GHz)-MSSC	Ins loss dB	Isol dB	VSWR	Pwr W* Fwd	Pwr W* Rev	Tuning Dots y/n	Customer number: Notes
	10-12	0.5	20	1.35:1	10	4	y	
	10.5-11.7	0.5	21	1.30:1	2	1	y	b
ab2	12.7-14.7	0.6	19	1.30:1	5	5	y	e 11-23-03
	12.75-13.25	0.5	20	1.25:1	10	0.2	y	
	12.75-13.25	0.5	20	1.25:1	10	1	y	058-00383-005
	14.0-16.0	0.7	18	1.30:1	10	5	y	
	14.2-15.35	0.6	20	1.25:1	10	0.2	y	
	14.2-15.35	0.6	20	1.25:1	10	1	y	058-00383-006 / 700-1756
	14.2-15.35	0.6	20	1.25:1	10	2	y	
	14.6-15.5	0.8	19	1.30:1	10	1	y	
	17.7-19.7	0.8	20	1.25:1	2	1	y	058-00383-007
Ab3	21.2-23.6	0.8	20	1.25:1	2	1	y	058-00383-008 (ab3) (e only)
	24.0-26.5	0.8	20	1.25:1	2	1	y	(e only)

WORLD HQ: 1702L Meridian Ave. Suite 127, San Jose, Ca 95125, U.S.A.
Tel: (408) 266-7404 FAX: (408) 266-4483
WEB: www.raditek.com E-mail: sales@raditek.com

Isolators: Microstrip Substrate on special carrier

RADI-FLOW-FHIGH-MSSC- Rev Pwr –Direction(R default)

5W reverse power maximum due load size and hole spacing

** Lumped element load on the ferrite can handle 1W at these frequencies as long as adequately heat sink

Do not heat above 130°C
Humidity 5-95% non-condensing
Max temperature during welding +350°C for 25msec

Extended Temperature range
At 80 °C, add 0.1 dB to Insertion Loss,
and subtract 1.0 dB from Isolation
At 85C °C, add 0.2 dB to Insertion Loss,
and subtract 3.0 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

We have exhaustively tested the Microstrip Drop in's.
Units passed all shock and vibration test.
The units have low mass and are very robust.
-Vibration in frequency range 1-5000Hz with acceleration 400m/sec2 (40g)
- repeated shocks with acceleration 1500m/sec2 (150g) and duration 1-5msec
- single shock with acceleration 15000m/sec2 (1500g) and duration 0.1-2msec
- linear centrifugal acceleration 5000m/sec2
- acoustic noise 50-10000Hz at sound pressure level up to 170dB
- absence of resonance in frequency range 1-100Hz

DIMENSIONS

size	unit	W	L	N	B	C	Th
Tolerance	in.	0.002	0.002	0.004	0.002	0.002	0.004
(+/-)	mm.	0.05	0.05	0.1	0.05	0.05	0.1
bc1	in.	0.374	0.531	0.175	0.250	0.441	0.065
	mm.	9.00	13.50	4.45	6.35	11.20	1.64
bc2	in.	0.402	0.678	0.244	0.568	0.29	0.065
	mm.	10.21	17.22	6.20	14.43	7.42	1.65
bc3	in.	0.375	0.620	tba	tba	tba	0.039
	mm.	9.525	15.75	tba	tba	tba	1.00
ab1	in.	0.28	0.52	0.195	0.41	0.17	0.064
	mm.	7.11	13.21	4.95	10.41	4.32	1.63
ab2	in.	0.28	0.52	0.182	0.41	0.17	0.065
	mm.	7.11	13.21	4.62	10.41	4.32	1.65
ab3	in.	0.238	0.48	0.184	0.36	0.13	0.06
(e only)	mm.	6.05	12.19	4.67	9.14	3.30	1.52

WORLD HQ: 1702L Meridian Ave. Suite 127, San Jose, Ca 95125, U.S.A.
Tel: (408) 266-7404 FAX: (408) 266-4483
WEB: www.raditek.com E-mail: sales@raditek.com