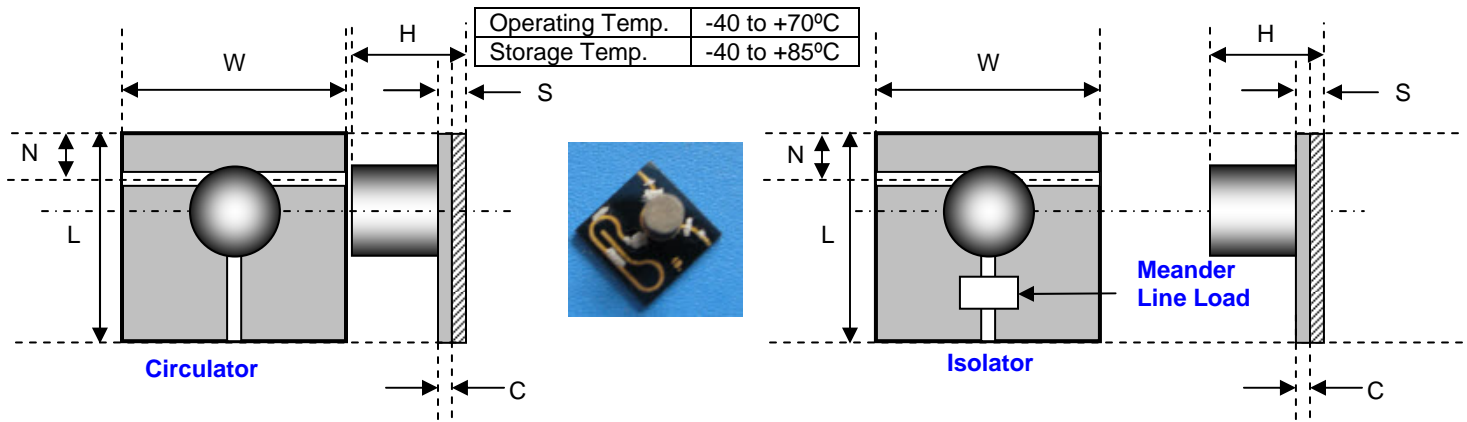


MSSM Metal Backed Substrate 2.0-55GHz (10% Bandwidth) Ferrite substrates on steel carriers.



Tolerance +0.00/-0.043 outline, +/- 0.11 Holes/ slot centers

Note: Dimension S (overall pad height) is critical, Dimension C is for reference only / not critical, PM: Phase Matching

Units: mm(Inch)
 Not to scale

Frequency GHz	I/C	W mm	L mm	H mm max	C mm Ref	N* mm	S +/- 0.035	In. loss (dB)	Isol. (dB)	VSWR :1	Pwr Fwd (W)	Pwr Rev (W)	Miscellaneous
2.3-2.7	I	17.5	17.0	5		2.54	1.3	0.5	20	1.3	2	0.25	tbc b
2.35-2.45	I	17.5	17.0	5		2.54	1.3	0.5	21	1.28	2	0.25	p
3.05-3.5	I	15	17.0	5	1.0	3.5	2	0.6	18	1.35	2	0.2	0.5 / 20 / 13 @ RT b SO 8252
3.1-3.4	I	15	17.0	5		3.5	1.3	0.6	18	1.5	2	0.2	b
3.4-4.2	I	15.0	17.0				1.3				2		
3.6-5.2 (Preliminary)	I	12	12	5				0.8 0.9	16 15	1.4 1.5	1	1	+25 -10 to +60C, b
3.9-4.4	I	15.0	17.0	5		2.54	1.3	0.6	18	1.3	2	0.25	p
4.2-4.4	I	12	12	5				0.5	20	1.25	1	1	b (NB only)
4.4-5.0	I	12.7	16	5.5		2.54	1	0.5 0.7	20 18	1.25 1.35	5	5	+25 -30 to +70, b
4.4-5.0	C	10.6	9	5		2.54	1	0.5	20	1.22	5	0.2	p
5.0-5.2	I	12	12	5				0.5	20	1.25	1	0.25	p
5.0-5.9	C	15.0	17.0	5		2.54	1.3	0.6	19	1.3	15	15	High Power p
5.2-5.9	I	10.6	9	5	0.635	1.5	1.3	0.5	20	1.3	2	0.25	p
5.2-5.95-HP	Circ	10.6	9	5	0.635	1.5	1.3	0.5	20	1.3	20	20	Optimized for 4.7-5.2 GHz 0.8/16/1.5
5.2-5.95 sp1	Circ	9.5	9.5	5	0.635	1.5	1.3	0.5	20	1.3	10	10	sp-1 SPECIAL
5.2-5.95 HP	Circ	10.6	9	5	0.635	1.5	1.3	0.5	20	1.3	20	20	High Power
5.3-5.9 (5585) 10x10	Circ	10	10	4.5	tba	tba	tba	0.5 0.7	20 17	1.25 1.35	5	5	b -55 to +85
5.3-5.9 (5585) 12x12	Circ	12	12	tba	tba	tba	tba	0.5 0.7	22 17	1.17 1.35	5	5	b -55 to +85
5.25-5.85	Circ	10.6	9	5	0.635	1.5	1.3	0.5	20	1.3	2	2	p
5.6-7.4	C	12	11	5	0.635	2.0	1.3	0.6	18	1.3	2	2	e
5.8-6.2	I	10.7	9	5			1.5	0.5	20	1.25	0.25	0.25	-20 to +65, b
5.8-6.7	I	12	11	6		2.5	1.64	0.5	20	1.25	1	0.25	-40 to +70
5.8-7.2	C	12	11	6		2.5	1.64	0.5	20	1.25	1	0.25	-40 to +70

MSSM Metal Backed Substrate 2.0-55GHz (10% Bandwidth)

Ferrite substrates on steel carriers.

Frequency GHz	I/C	W mm	L mm	H mm max	C mm Ref	N* mm	S +/- 0.035	In. loss (dB)	Isol. (dB)	VSWR :1	Pwr Fwd (W)	Pwr Rev (W)	Miscellaneous
5.85-7.02	I	12	11	6		2.5	1.64	0.5	20	1.25	1	0.25	-40 to +70
6.0-7.0	C	12	11	6	0.635	2.0	1.64	0.5	19	1.25	20	20	e -30 to +70
7.0-9.0 (b)	C	10	9	5	0.635	2.5	1.64	0.6	17	1.35	1	1	b -40 to +70
7.0-9.0 (e)	C	10	9	5.5	0.635	2.5	1.64	0.6	18	1.30	1	1	e -40 to +70
7.2-7.79	C	10	9	5.5	0.635	2.5	1.64	0.5	19	1.25	1	1	-90 to +70
7.1-8.5	I	10	9	5.5	0.635	2.5	1.64	0.5	18	1.3			
8-9	C	7	7	5.0	0.635	1.5	1.3	0.5	20	1.25	20	20	High Power
8-9	I	7	7	5.0	0.635	1.5	1.3	0.5	20	1.25	10	0.2	
8-10.5-small- (0606) 1-1.5 GHz BW	C	6	6	4.5	tbc	tbc	tbc	0.6 0.8	20 18	1.25 1.30	5		room -10 to +70, b
8.0-11.5	C	9	9	5	tbc	tbc	tbc	0.6 0.7	18 17	1.30 1.40	8 25w Pk		room -10 to +70
8.0-11.5	I	9	13.5 with load	5	tbc	tbc	tbc	0.6 0.7	18 17	1.30 1.40	8 25w Pk		room -10 to +70
8.5-9.5	I	7	11	5.5	tbc	tbc	tbc	0.5	19	1.25	10	1	-10 to +70, b
8.5-10.5	I	7	7	4.5	0.635	1.5	1.3	0.5	18	1.3	6	1	p
8.5-10.5	C	9	10	4.7				0.5 0.6	18 17	1.30 1.35	6 6	6	+25 -30 to +60, b
8.8-10.2	C	7	7	4.5	0.635	1.5	1.3	0.5	18	1.3	10	1	High Power RFQ 13036 b
8.9-10.7	C	7	7	4.5	tbc	tbc	tbc	0.4/0.5	20/18	1.25/1.3 0	3		15W Pk, room/ -35 to +70
9.0-9.6	I	7	11	5.5	tbc	tbc	tbc	0.5	20	1.25	10	1	-10 to +70, b
9-10 HP	I	7	11	5.5	tbc	tbc	tbc	0.5	20	1.25	10	1	-10 to +70, b
9-10 HP	C	7	7	5.0	0.635	1.5	1.2	0.5	20	1.25	20	1	High Power
9-10 std	I/C	7	7	5.0	0.635	1.5	1.3	0.5	20	1.25	10	0.2	
9-10 std	C	7	7	4.7				0.5 0.6	20 18	1.25 1.30	6 6	6	+25 -30 to +60, b
9-10-sp1	C	8.9	12.1	5.0	0.635	4.48	1.3	0.5	20	1.25	20	20	High Power
9-10-small -(6060a)	C	6	6	5.0	0.635	4.48	1.3	0.4 0.65	19 17	1.25 1.33	10	0.2	+25 -30 to +60, b
9-10-small -(6060b)	C	6	6	4.0	0.635	1.5	1.3	0.4 0.65	19 17	1.25 1.33	10	0.2	+25 -30 to +60, b
9-10-small- (0606c) <1GHz BW	C	6	6	2.5	tbc	tbc	tbc	0.6 0.8	20 18	1.25 1.30	5		room -10 to +70, b
9-10.5 (6363)	I/C	6.35	6.35	5.0				0.5 0.6	20 18	1.25 1.30	10	0.2	room -30 to +60°C
9-10.5 (7x7)	I/C	7	7	5.0				0.5 0.6	20 18	1.25 1.30	10	0.2	room -30 to +60°C
9-10.5 (8x8)	I	8	8	4				0.5 0.7	20 18	1.25 1.30	10	2	room -40 to +85
9.1-9.6	C	7	7	5.0	0.635	1.5	1.64	0.5	20	1.22	1	1	
9.2-9.6	C	7	7	5.0	0.635	1.5	1.2	0.5	20	1.25	20	20	High Power
9.5-11.5	I/C	7	7	5.0	0.635	1.5	1.64	0.5	20	1.22	1	0.2	p
10-12	I/C	7	7	5.0	0.635	1.5	1.64	0.6	20	1.35	10	0.2	
10.6-11.8	I/C	7	7	5.0	0.635	1.5	1.64	0.6	20	1.35	10	0.2	p
10.7-12.7 (7x6)	I	7	6	5.5	0.635	1.5	1.64	0.4 0.5	20 18	1.25 1.30	1	1	room -30 to +60
10.7-12.7	I/C	7	7	3.8	0.635	1.5	1.435	0.4	20	1.25	3	1	room

RADlorC - MSSM (2.0-55G) Generic Specifications may be subject to change

09/21/11

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

MSSM Metal Backed Substrate 2.0-55GHz (10% Bandwidth)

Ferrite substrates on steel carriers.

Frequency GHz	I/C	W mm	L mm	H mm max	C mm Ref	N* mm	S +/- 0.035	In. loss (dB)	Isol. (dB)	VSWR :1	Pwr Fwd (W)	Pwr Rev (W)	Miscellaneous
(7x7)								0.5	18	1.30			-20 to +70
11.5-11.9-(7070)	I	7	7	4.5				0.6	18	1.35	1	1	-40 to +85C, b Storage temp. -55 to +95C
11.5-11.9-small-(6363) C# IS175	I	6.3	6.3	4.5	0.635	1.5	1.2	0.6	18	1.35	1	1	-40 to +85C, b Storage temp. -55 to +95C
11.5-11.9-small-(6060)	I	6	6	4.5				0.6	18	1.35	1	1	-40 to +85C, b Storage temp. -55 to +95C
11.5-13.5	C	7	7	3.76	0.57	1.5	1.17	0.5	19	1.25	1	1	
11.7-12.75	C	7	7	3.76	0.57	1.5	1.17	0.5	20	1.25	5	5	
11.7-14.5	I	7	7	6.0		1.5	1.5	0.6	20	1.3	1	0.25	-40 to +70
12.0-13.5	C	7	7	6.0				0.6	20	1.3	5	5	0 to +85
12.0-12.7	I	7	7	5			1.5	0.5	20	1.25	0.25	0.25	-20 to +65, b
13-15	I	7	7	6.0		1.5	1.5	0.6	20	1.3	1	0.25	-40 to +70
13.0-13.6-(7x7)	I	7	7	4.5				0.6	18	1.35	1	1	-40 to +85C, b Storage temp. -55 to +95C
13.0-13.6-small-(6363) C# IS176	I	6.3	6.3	4.5	0.635	1.5	1.2	0.6	18	1.35	1	1	-40 to +85C, b Storage temp. -55 to +95C
13.0-13.6-small-(6x6)	I	6	6	4.5				0.6	18	1.35	1	1	-40 to +85C, b Storage temp. -55 to +95C
13.5-14.5	C	7	7	3.76	0.57	1.5	1.17	0.5	19	1.25	10,20	10,20	High Power RFQ 10955 b
14.0-14.5	C	7	7	3.76	0.57	1.5	1.17	0.5	19	1.25	1	1	
14.25-15.5	C	7	7	3.76	0.57	1.5	1.17	0.5	19	1.25	1	1	
14.4-15.4	C	7	7	3.76	0.57	1.5	1.17	0.5	19	1.25	1	1	
14.75-15.25	I	7	7	4.5	0.5	1.5	1.05	0.5	20	1.25		1	-40 to +70, b
15-18	C	7	7	4.5				0.7	18	1.35	1	1	b
15.2-18.2 e 6x6	C	6	6	4.5	0.50	1.5	1.5	0.6	18	1.25	1	1	e -30 to +70
5.2-18.2 b 7x7	C	7	7					0.6	18	1.3	1	1	b -30 to +70
5.2-18.2 b 8x8	C	8	8	5.0	0.50	1.5	1.5	0.8	17	1.40	1	1	b -30 to +70
15.5-16.5	I	7	7	4.5	0.53	1.5	1.03	0.6	19	1.25	1	0.3	
15.5-16.5	C	7	7	4.5	0.53	1.5	1.03	0.6	19	1.25	4	1	
15.5-17.9	C	7	9	5	0.5	1	1.5	0.6	19	1.35	10	10	e
16.0-17.0	I	7	7	4.5	0.5	1.5		0.7	18	1.3	2	1	e -30 to +70°C
16.62-17.71	I	7	7	4.5	0.53	1.5		0.65	19	1.3	2	1	p
16.85-20.5	I	6	6	4.5	0.53	1.0	1.03	0.7	18	1.35	2	0.25	
17.0-17.5	I	7	7	4.5	0.53	1.5	1.03	0.6	20	1.3	1	1	
17.0-17.5	C	7	7	4.5	0.53	1.5	1.03	0.6	20	1.3	4	1	
17.25-18.75	I	7	7	4.5	0.53	1.5	1.03	0.7	19	1.25	1	0.25	
17.5-18.5	C	6	6	3.7	0.38	1.5	1	0.7	18	1.3	4	4	b -10 to +70
18.0-18.7	I	7	7	4.5	0.53	1.5	1.03	0.8	20	1.3	2	2	
18.86-19.26	C	6	6	4				0.8	20	1.3	2	2	p
19-21	C	5	5	4		1.35	1.2	0.8	18	1.3	2	1	
19-21	I	5	7	4	0.38	1.35	1.2	0.8	18	1.3	2	1	
19.0-21.5	I/C	5	7	4	0.38	1.35	1.2	0.85	18.5	1.35	2	1	p
19.5-20.5	I	5	7	4	0.38	1.35	1.2						
20.2-21.2	I	6	6	4	0.38	1	1.25	0.8	18	1.3	1	1	p

MSSM Metal Backed Substrate 2.0-55GHz (10% Bandwidth) Ferrite substrates on steel carriers.

Frequency GHz	I/C	W mm	L mm	H mm max	C mm Ref	N* mm	S +/- 0.035	In. loss (dB)	Isol. (dB)	VSWR :1	Pwr Fwd (W)	Pwr Rev (W)	Miscellaneous
21.1-21.3	I	6	6	3.3	0.50			0.9	18	1.30	2	2	-40 to +70°C, b
22-24	C	6	6	4	0.25	1	1.25	0.8	18	1.3	2	0.2	b
22.5-25.0	C	6	6	4	0.25	1	1.25	0.8	18	1.3	2	0.2	b
23-25	C	6	6	4	0.25	0.75	1.25	0.8	18	1.3	2	0.2	b
23-27	C	6	6	3.4	tba	tba	tba	1.1	18	1.35	1	1	b
23.5-24.5	C	6	6	4	0.25	1	1.25	0.8	18	1.3	2	0.2	b
23.8-24.8	C	6	6	2.3	tba	tba	tba	1.0	20	1.3		0.01	b
24-24.25	C	6	6	4	0.25	1	1.25	0.8	18	1.3	2	0.2	p
24.25-26.27	C	5	6	4	0.25	1	1.25	0.8	18	1.3	2	1	p
24.25-26.27	I	6	6	3.4	tba	tba	rba	1	20	1.3	1	1	-10 to +70, b
24-30	I	6	5	3.5	0.25	1.1	0.75	1.2	20	1.3	1	1	b ftc 9-9-07
24-30	C	5	5	3.5	0.25	1.35	0.75	1.3	20	1.35	1	1	b 9-7-06
25-26	I	6	6	4				0.8 0.9	20 20	1.3 1.35	7.5	2	room -40 to +70°C, b
25-27	C	5	5	3.5	0.25	1.35	0.75	0.9	18	1.35	1	1	b
27.25-31.70	I/C	5	5	4	0.25	1	1.25	1.2	19	1.3	2/5	1	b
28-30	I	5	5	4	0.25	1	1.25	1.1	20	1.3	1	1	p
28-32	I/C	6	6	4.5	0.25	1.0	1.25	1.1	18	1.35	2	1	B 10/08/08
29.0-30.0	I	5	5	3.3				0.9 1.0	23 20	1.30 1.35	4	4	room -40 to +70°C, b
29-31	I	6	6	3	tba	tba	tba	1.0	20	1.3	1	1	-10 to +70, b
29.0-31.5	I	5	5	2.3		tba	1.25	0.8	20	1.3	2	0.5	p
29.75-40.25	I	5	5	4.0		tba	1.25	1.3	16	1.3	5	1	wide band b
29.5-30.5	I	5	5	3.5	0.25	0.9	1.25	0.9	20	1.3	2	1	P
29.5-31.5	I	5	5	4.0	0.25	1.1	1.25	0.9	20	1.35	2	0.5	p
29.6-30.6 (LM2353205)	I	5	5	3.3	0.25	0.9	1.25	0.9 0.8	20 19	1.30 1.30	2 2	2 2	b, -40 to+60C -40 to+70C b ud 6-17-09
30-31	I	5	5	2.3				1.0 1.1 1.2	20 19 18	1.30 1.35 1.40	2	2	room -30 to +60°C, p -55 to +70C, b -55 to +85C storage
30-31	I	5	5	3	0.5	tba	tba	0.9	20	1.3		2	-30 to +70, b
31-33	I	6	5	4.5	0.20	1.0	1.25	1.0	20	1.35	1	0.25	p
31-34 -b	I	6	5	4.5	0.20	1.0	1.25	1.0	20	1.35	1	1	b -30 to +65°C
31-34 -e	I	6	5	4.5	0.20	1.0	1.25	1.0	20	1.35	1	1	e -30 to +65°C
31.5-32.5	I	5	5	2.3				1.0 1.1	20 19	1.30 1.35	1	1	room -30 to +60°C, b
31.5-34.1	I	5	5	2.3				1.2 1.3	19 18	1.30 1.35	1	1	room -30 to +60°C, b
31-36	C	4.5	4.5	2.3				1.2	18	1.35	2, 5	2	-10 to +60, p
31.5-36.0	C	5	5	3	0.25		0.8	1.1 1.3	17 15	1.35 1.50	2	2	room -40 to +70
31.5-36.0	I	5	5	3	0.25		0.8	1.1 1.3	20 18	1.35 1.45	2	2	room -40 to +70
32-34	I	6	5	4.5	0.25	1.0	1.25	0.9	20	1.35	2	1	-30 to +70
32.8-34.8	I	5	5	3	0.20	1.1	0.7	0.9	20	1.30	3	3	b
33-35	I	4.5	4.5	2.3	0.20	1	1.25	1.2	18	1.35	2	1	p
33-33.5	C	5	5	2.3	0.20	1.1	1.25	1.0	20	1.25	5	0.5	draft p
33-35	I	4.5	4.5	2.3	0.20	1	1.25	1.2	18	1.35	2	1	
33-35	C	4.5	4.5	2.3	0.20	1	1.25	1.2	18	1.35	5	5	
33-36	C	4.5	4.5	2.3	0.20	1.5	0.70	1.0	20	1.3	5	5	b 4/17/08 (storage-60 to 85c)
33-36	I	5	5	2.9	tba	tba	tba	1.1 1.2	20 18	1.35 1.40		2	room -30 to +70°C

RADIorC - MSSM (2.0-55G) Generic Specifications may be subject to change

09/21/11

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

MSSM Metal Backed Substrate 2.0-55GHz (10% Bandwidth)

Ferrite substrates on steel carriers.

Frequency GHz	I/C	W mm	L mm	H mm max	C mm Ref	N* mm	S +/- 0.035	In. loss (dB)	Isol. (dB)	VSWR :1	Pwr Fwd (W)	Pwr Rev (W)	Miscellaneous
33-37	I	5	5.5	4	0.20	tba	1.25	1.2	18	1.35	2	2	p
33-37	C	4.5	4.5	3.5	tba	1.35	1.25	1.2	18	1.35	5		SO 10179
33.3-34.1	I	5	5	2.3				1.1 1.2	20 19	1.30 1.35	1	1	room -30 to +60°C, b
33.4-36	C	4.5	4.5	2.8				1.1	23	1.3	1	1	b
33.0-35.5	C	5	5	3.5	0.20	1.5	1.2	1.2	17	1.4	5	5	p
33.5-34.5	C	4.5	4.5	3.5	0.20	1	1.2	1.2	17	1.4	6	6	p
33.5-35.5	C	4.5	4.5	3.5	0.20	1.5	1.2	1.2	17	1.4	6	6	B 1.1/18/1.3 at RT (storage-60 to 85c)
34-36	I	5	5	2.9	0.20	tba	0.7	1.0	20	1.3	1	1	
34-36	I	5	5	2.9	0.2	tba	0.7	1.0 1.1 1.2	20 18 18	1.35 1.40 1.4	3	2	room -40 to +70°C, b -55 to +70C, b (-55 to +85C storage).
34-36 (-5x5)	C	5	5	2.9	0.20	1.37	0.7	1.0	20	1.3	2	1	
34-36	C	4.5	4.5	3.3	0.20	1.37	1.3	1.0	20	1.3	3	3	-30 to +70°C
34-36 (-4070)	C	4.5	4.5	3.3	0.20	1.5	0.7	1.0	20	1.3	5	5	-40 to +70°C, b
34.35-34.65 34.5-35.5 34.6-35.5	C	4.5	4.5	3.3	0.20	1.5	1.2	0.7 0.9	23 20	1.2 1.3	5	5	room P -30 to +50 P magnet 1.3mm dia, center 2.2mm from top
34.5-35.5 (LM2353178)	I	5	5	3.3	0.20	1.1	1.20	1.0 0.9	20 19	1.35 1.35	2 2	1 or 2 1 or 2	b, -40 to+60C -40 to+70C b ud 6-17-09
34.5-35.5 -min (evj)	C	3.5	4.0	2.7	0.20	0.7	0.7	0.9 1.0	18 20	1.3	2	2	room temp -30 to +70C b pad width 0.14mm
34.5-35.5 (std)	C	4.5	4.5	3.3	0.7	1.5	1.2	1.0	20	1.35	2	2	-30 to +60°C, b
34.7-38.3	I	5	5	3.2	0.2	1.1	1.25	1.1	17	1.35	1	0.25	
35.5-38.0	I	5	5	3.2	0.2	1.1	1.25	1.1	17	1.35	1	0.25	-40 to +85°C
35-39	I	5	5	3.3				1.2	18	1.30	2	2	b
35-39	I	5	5.5	4	0.5	1.35	0.7	1.3	17	1.4	2	2	-40 to +70.e
35.0-40.0	C	4.5	4.5	3.3				1.2	18	1.35	1	1	room, b
35.0-40.0	I	5	5	4	0.20	1	1.25	1.2	20	1.33	1	0.25	B 3-6-04
36.7-37.0	C	4.5	4.5	3	0.20	1.5	0.5	0.9 1.1	20 18	1.25 1.35	1	1	room -40 to +85, b
37.0-40.0	I	5	5	3.3	0.20	1	0.7	1.0	20	1.31	1	0.5	b
37.0-40.0	C	4.5	4.5	2.8				1.1	20	1.3	1	1	b
37-38	I	6	5	4	0.20	tba	0.7						
37-39	I	6	5	4	0.20	tba	0.7						
37.5-39.0	I	5	5	3.3				1.2	18	1.30	2	2	b
37.5-39.5	I	5	5	3.3				1.0 1.1	20 18	1.35 1.35	1	1	room -30 to +70, b
38-42	I	5	5	4	0.2	1.1	1.2	1.1	17	1.35	2	1	
38.5-41.5	I	5	5	3	0.25		0.8	1.1	20	1.35	2	1	b
39.8-40.2	I	5	5	2.8				1.1	20	1.30	1	1	-30 to +60C, b
40.5-42.5	I	5	5	3.2	0.2	1.1	0.7	1.2	17	1.35	1	0.25	
40.5-42.5	C	4.5	4.5	3.3	0.2 +/- 0.015	1.1 +/- 0.05	0.7 +/-0.15	1.1 1.3	20 18	1.35 1.40	1	1	+25 -30 to +60C, b
40.5-43.5	C	4.5	4.5	3.3	0.2	1.1	0.7	1.2	20	1.3	1	1	-30 to +60

RADiorC - MSSM (2.0-55G) Generic Specifications may be subject to change

09/21/11

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

MSSM Metal Backed Substrate 2.0-55GHz (10% Bandwidth)

Ferrite substrates on steel carriers.

Frequency GHz	I/C	W mm	L mm	H mm max	C mm Ref	N* mm	S +/- 0.035	In. loss (dB)	Isol. (dB)	VSWR :1	Pwr Fwd (W)	Pwr Rev (W)	Miscellaneous
41.0-43.0	I	5	5	3.2	0.2	1.1	0.7	1.2	17	1.35	1	0.25	-40 to +85°C
42.1-42.3	I	5	5	3.2	0.2	1.1	0.7	0.9	20	1.30	2	0.5	-40 to +85°C
42.1-42.3	I	5	5	3.2	0.2	1.1	0.7	1.1	20	1.30	2	2	-40 to +85°C
43.0-46.0	I	5	5	3.2	0.2	1.1	0.7	1.2	17	1.35	1	0.25	-40 to +85°C
54.25-55.25		2.0	5.5	2.0	0.15	0.85	0.7	1.2	20	1.5	0.5	0.25	

MSSM Metal Backed Substrate 2.0-55GHz (10% Bandwidth) *Ferrite substrates on steel carriers.*

MSSM Wide Band

3-6 Preliminary	C	30 or 25	30 or 25	tba	tba	tba	tba	0.7 0.8	16 14	1.40 1.55	1	1	room -10 to +60°C
6-11 Preliminary	C	15	15	tba	tba	tba	tba	0.7 0.8	16 15	1.40 1.50	1	1	room -10 to +60°C
6-12 Preliminary	I	12	11	4.5	tba	tba	tba	0.8 1.0	16 15	1.40 1.50		5	room -30 to +70°C
6-18 Preliminary	I	12	11	4.5	tba	tba	tba	1.5 1.7	12 10	1.70 1.90		5	room -30 to +70°C
7.0-13.0	C	12.0	12.0	4	tba	tba	tba	0.9	15	1.5	1	0.25	-30 to +70°C
8-12	C	15	15	6	tba	tba	tba	0.8	17	1.35		2	-55 to +85 (b) Room temp.
								0.7	18	1.30			

MSSM-HDI-b only Option (Part # suffix-HDI)

Opt	Description	Instruction
HDI	High temperature soldering / curing	Temperature 200 °C max for 3 - 5 minutes Max.

RADC-34.5-35.5-MSSM-2WR-HDI* Circulator

Frequency GHz	I/C	W mm	L mm	H mm max	C mm Ref	N* mm	S +/-0.035 (+/-0.0014)	In. loss (dB)	Isol. (dB)	VSWR :1	Pwr Fwd (W)	Pwr Rev (W)	Miscellaneous
34.5-35.5	C	3.5	4.0	2.3	0.20	0.7	0.7	1.0	20	1.3	2	2	E pad width 0.14mm -30 to +70C
34-36	C	4.5	4.5	3.3				1.0	20	1.3	2	2	-30 to +70C , b

Application Notes

- Line width 0.14mm (typical),
- unit should be mounted with thin smear of non conductive epoxy, with temperature of polymerization close to 80 deg c, but important to leave area around microstrip junctions clear to facilitate grounding.
- Distance from a module cover about 1.0 - 1.5mm without any change in performances and about 0.7mm with minimum changes.
- If soldering keep temperature to 130 deg C for 3 - 5 minutes Max.
- If non ultrasonic wedge bonding heat the unit to 150C for 3 minutes max
- Maximum temperature during welding process 350C for 25mSec
- Curing: survives non operating 120 °C for up to 10 min.// 150 °C for up to 3 min.,
- Typical part #s

Extended Temperature range

At -40C or 80 °C, add 0.1 dB to Insertion Loss, and subtract 1.0 dB from Isolation
 At 85 °C, add 0.2 dB to Insertion Loss, and subtract 2.5 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