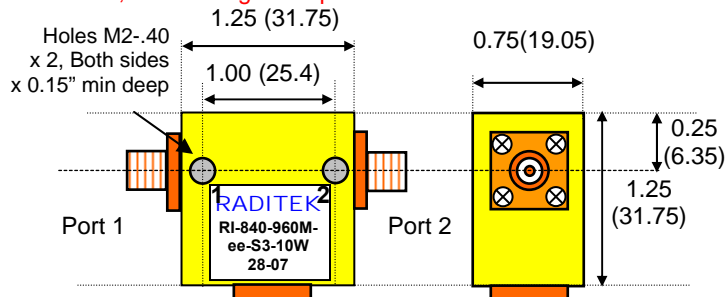


RI-ee1 isolator 150W forward and 35W reverse power* (500W peak power)
 RC-ee1 circulator 150W forward and 150W reverse power (500W peak power)
640MHz-2.5GHz, 10% Bandwidth, SMA or N-Type Connectors

RADITEK offers a full range of high performance isolators and circulators. Standard operating temperature is -40 to +85°C. Extended temperatures and power handling with various loads up to 35 Watts available. Ensure Load Flange is kept <85°C*
 Bright Nickel-plated finish, with Storage Temp of -55 to 110°C



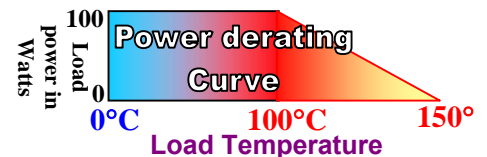
Units: Inch (mm)
 Tolerance:
 x.xx ±0.02
 x.xxx ±0.01
 Machined surfaces $63\sqrt{\text{in}}$
 Bend radius $1/32$ inch



Units: mm(Inch)
 Not to scale

Replaced with connectors for circulator versions

Most types and gender connectors are available.
 Standard circulation: In at 1, Out at 2 (-R), for In at 2, Out at 1 (-L).



	Low IMD Models (we can measure)	-H	-U
Frequency	Parameters		
800-960M	Model 2X 50W tones 1MHz Apart	-70 dBc	-75 dBc
1.9-2.2G	Model 2X 30W tones 1MHz Apart	-70 dBc	-75 dBc

Direction of RF:	
R	Default ▶
L	◀

Order Examples: RI-F1-F2M-ee1-SX-35WR
 I=ISOLATOR / C=CIRCULATOR

Option:

-U	Lowest IMD.
-PM3	Phase Matching ±3 degrees
-RUG	Ruggedized, all screws secured with loctite

N / SMA Connector options (X)				
Isolator		Circulator		
Port 1	Port 2		Port 3 Male	Port 3 Female
Female	Male	-1	-11	-21
Male	Female	-2	-12	-22
Female	Female	-3	-13	-23
Male	Male	-4	-14	-24

Operating Temperature: -20 to 85°C

*Load and Base plate temperature to be kept below 85° C
 Weight = 0.0980 Kg or 0.216Lbs

Frequency MHz	Insertion Loss dB Max.	Isolation Min. dB	Return Loss dB	VSWR Max.	Notes
824-849	0.3	24	23	1.15	*Cellular
869-894	0.3	24	23	1.15	*Cellular
900-960	0.4	20	21	1.20	*Cellular
1805-1880	0.3	23	23	1.15	*DCS
1930-1990	0.4	22	22	1.17	*PCS 8/30/06
2110-2170	0.3	23	23	1.15	*UMTS
646-730	0.45	18	18	1.3	
650-750	0.45	20	19	1.25	0.3/20/20 room temp
657-740	0.45	18	18	1.3	

RIorC-640-2500M-ee1-S(N)-35WR-sj

Specifications may be subject to change

03/01/11

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Frequency MHz	Insertion Loss dB Max.	Isolation Min. dB	Return Loss dB	VSWR Max.	Notes
690-740	0.45	19	19	1.25	
695-705	0.4	20	20	1.21	
698-787	0.4	20	19	1.25	dc 8-30-09 SO 9067
700-800	0.6	18	18		
700-825	0.6	18	18		
725-775	0.4	20	19	1.25	
725-825	0.35	20.5	20	1.21	
728-775	0.35	20.5	19.5	1.22	dc 8-30-09 SO 9067
740-746	0.3	22	21	1.20	
744-748	0.3	22	21	1.20	
740-806	0.5	19	19	1.25	
750-850	0.4	20	20	1.21	Test 2-28-05
760-830	0.4	20	21	1.20	p
770-880	0.4	20	20	1.21	p
790-950	0.4	20	21	1.20	
790-960	0.4	20	21	1.20	
800-810	0.3	24	21	1.20	p
800-900	0.4	21	21	1.20	Try 0.3/22/21 9-1-04
800-960	0.45	20	21	1.20	-20 to 65C
800-1000	0.5	19	19	1.25	-20 to 65C
800-1200	0.8	14	12.7	1.6	use d model 0.8/14/1.6 @ 0-60C
812-813	0.3	22	21	1.20	
820-870	0.3	23	19	1.25	
820-900	0.4	20	19	1.25	
820-960	0.4	20	20.8	1.20	
822-826	0.3	25	21	1.19	
824-894	0.4	21	19	1.25	
824-900	0.4	21	19	1.25	
825-835	0.4	23	19	1.25	
834.5-838.5	0.3	25	21	1.19	
835-850	0.3	21	19	1.25	
830-930	0.4	20	19	1.25	IMD 70dBc @ 2x40W
840-860	0.3	25	21	1.20	
840-900	0.4	23	21	1.19	
847-851	0.3	25	21	1.19	
850-950	0.4	21	21	1.20	
850-1000	0.5	20	20	1.21	
855-900	0.3	22	22	1.18	Op.Temp.-32 to +60C
860-900	0.3	25	23	1.15	
860-960	0.4	19	21	1.20	
863-873	0.3	25	21	1.20	
865-868	0.3	25	21	1.20	
867-869	0.25	30	25	1.12	
869-894	0.3	25	23	1.15	

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Frequency MHz	Insertion Loss dB Max.	Isolation Min. dB	Return Loss dB	VSWR Max.	Notes
870-920	0.3	20	22	1.18	
870-960	0.4	19	21	1.20	
870-970	0.31	21	20	1.21	
875-975	0.31	21	20	1.21	
876-915	0.3	20	21	1.19	
876-960	0.4	19	21	1.20	
890-915	0.3	22	21	1.19	
890-920	0.3	21	21	1.19	p
890-960	0.4	19	21	1.20	
896-960	0.4	19	21	1.20	
900-928	0.3	22	21	1.19	
900-960	0.4	20	21	1.20	
900-1200	0.6	14	14	1.5	Wide Band (300MHz) p
900-1300	0.5	14	14	1.5	0.5/14/14@ -20 to +85 970-1230MHz (260MHz BW) 1.0/12/11 at band edges
902-927	0.3	20	21	1.19	
910-920	0.25	25	21	1.20	
915-964	0.3	23	21	1.20	
917-960	0.3	20	19	1.25	-10 to 75C
920-960	0.3	25	21	1.19	
925-960	0.3	25	21	1.19	
929-960	0.3	25	21	1.19	
925-964	0.3	25	21	1.19	
935-960	0.3	25	21	1.19	
936-960	0.3	25	21	1.19	
950-1050	0.3	23	20	1.25	
950-1250	0.6	14	14	1.5	Wide Band (300MHz)
950-1260	0.6	14	14	1.5	Wide Band (310MHz)
950-1280	0.6	14	14	1.5	Wide Band (330MHz)
950-1300	0.6	14	14	1.50	Wide Band (350MHz)
960-1200	0.5	15	15	1.43	Wide Band
960-1215	0.5	15	15	1.43	Wide Band , p
960-1220	0.5	15	15	1.43	Wide Band , p
980-1340	0.6	14	14	1.50	Wide Band, (360MHz)
1000-1100	0.3	23	21	1.20	target 0.3/25/1.25
1000-1200	0.4	21	21	1.20	
1020-1040	0.3	26	20	1.25	
1020-1100	0.3	23	20	1.25	
1020-1040	0.3	26	20	1.25	
1020-1108	0.3	23	20	1.25	
1025-1225	0.35	21	21	1.20	
1030-1090	0.25	21	21	1.20	
1040-1140	0.3	23	19	1.25	
1050-1250	0.4	21	21	1.20	0.3/21/1.2 @ room temp
1070-1275	0.4	21	21	1.20	
1100-1220	0.3	22	21	1.20	p

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Frequency MHz	Insertion Loss dB Max.	Isolation Min. dB	Return Loss dB	VSWR Max.	Notes
1100-1300	0.4	21	21	1.20	
1156.5-1196.5	0.3	21	21	1.20	T
1180-1220	0.3	21	21	1.20	
1200-1400	0.35	22	21	1.20	
1200-1415	0.35	22	21	1.20	-10 to +55 C
1220-1300	0.3	22	21	1.20	
1230-1350	0.3	22	21	1.20	
1240-1420	0.35	22	21	1.20	p
1245-1255	0.3	22	21	1.20	p
1250-1330	0.3	22	21	1.20	
1250-1350	0.35	21	20	1.25	P
1270-1282	0.25	22	23	1.15	
1270-1380	0.35	22	21	1.20	
1300-1400	0.3	21	21	1.20	
1300-1500	0.4	20	21	1.20	
1310-1410	0.3	21	21	1.20	p
1315-1515	0.4	20	21	1.20	
1350-1550	0.4	20	21	1.20	
1350-1600	0.4	20	19	1.25	p
1375-1452	0.3	20	20	1.20	
1400-1575	0.5	20	19	1.25	
1400-1700	0.4	20	19	1.25	
1427-1525	0.3	22	21	1.20	
1428-1522	0.3	22	21	1.20	
1435-1535	0.3	22	2	1.20	
1450-1550	0.3	21	21	1.20	
1450-1650	0.35	20	19	1.25	
1452-1492	0.25	22	23	1.15	
1500-1580	0.3	21	21	1.20	
1500-1600	0.3	21	21	1.20	
1500-1620	0.3	23	23	1.15	p
1500-1700	0.35	20	19	1.25	0 to 55C
1500-1800	0.40	20	19	1.25	-30 to 70C
1500-2000	1.0	15	15	1.42	15 db Isolation / return 1535-1965MHz 0-70C 11 db at edges (1-20-08 dc)
1550-1615	0.25	22	23	1.15	p
1554-1564	0.25	24	22	1.17	p
1555-1595	0.3	21	21	1.20	T
1570-1580	0.25	22	23	1.15	
1574-1576	0.25	22	23	1.15	
1600-1660	0.3	25	23	1.15	
1646-1661	0.25	25	23	1.15	
1600-1700	0.3	20	21	1.20	
1600-1800	0.4	20	21	1.20	
1600-1900	0.4	19	18	1.30	

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1600-2000	0.5	18	17.7	1.30	
1650-1850	0.4	20	21	1.20	
1705-1885	0.31	21	20	1.21	
1700-1840	0.4	20	23	1.15	
1700-1900	0.4	20	21	1.20	
1700-2000	0.4	20	19	1.25	
1700-2200	0.55	17	17	1.32	0.5/18/18.5 @ RT 1-3-08
1708-1712	0.3	25	21	1.19	
1710-1785	0.4	20	23	1.15	
1710-1880	0.3	23	23	1.15	@ 0 TO 50°C
1710-1880	0.4	20	23	1.15	
1710-1900	0.4	20	23	1.15	
1740-1920	0.4	20	23	1.15	p
1745.5-1749.5	0.3	25	21	1.19	
1750-1790	0.3	25	23	1.15	
1750-1850	0.4	20	23	1.15	
1750-2200	0.5	19	19	1.25	
1783-1787	0.3	25	21	1.19	
1800-2000	0.35	20	21	1.20	
1800-2300	0.5	20	18	1.3	
1800-2100	0.4	20	19	1.25	
1800-2180	0.5	19	19	1.25	dcs/pcs/umts (19% BW)
1800-2200	0.7	19	19	1.25	
1800-2300	1.0	19	19	1.25	
1805-1880	0.35	20	21	1.20	
1830-2010	0.41	20	21	1.20	
1848-1852	0.3	25	21	1.19	
1850-1910	0.3	22	21	1.20	
1850-1950	0.3	22	21	1.20	
1850-1990	0.35	21	21	1.20	
1850-2170	0.5	20	19	1.25	p, Wide Band 0 to + 50C
1878-1882	0.3	25	21	1.19	
1880-1920	0.2	22	21	1.19	
1900-2100	0.4	20	21	1.20	
1900-2200	0.5	20	19	1.25	
1900-2300	0.5	20	19	1.25	Wide Band 0 to + 50C
1908-1912	0.3	25	21	1.19	
1920-1980	0.25	22	21	1.20	
1930-1990	0.25	22	21	1.20	

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Frequency GHz	Insertion Loss dB Max.	Isolation Min. dB	Return Loss dB	VSWR Max.	Notes
2.0-2.2	0.4	20	21	1.20	
2.0-2.3	0.45	20	19	1.25	Wide Band -0 to + 85C
2.0-2.4	0.5	20	19	1.25	Wide Band -0 to + 85C
2.0-2.5	0.5	20	19	1.25	Wide Band -0 to + 85C
2.10-2.17	0.3	23	23	1.15	
2.1-2.2	0.3	23	23	1.15	
2.1-2.4	0.4	20	19	1.25	
2.11-2.17	0.3	23	23	1.15	
2.15-2.25	0.3	23	23	1.15	
2.17-2.20	0.3	23	23	1.15	p
2.20-2.23	0.3	23	23	1.15	
2.2-2.3	0.3	23	23	1.15	
2.20-2.35	0.3	23	23	1.15	p
2.2-2.4	0.4	23	23	1.15	
2.2-2.5	0.5	23	22	1.17	
2.25-2.45	0.3	23	23	1.15	Special: isolation 25dB from 2.3-2.4GHz (0-50C)
2.3-2.4	0.3	23	23	1.15	
2.3-2.5	0.3	22	18	1.30	0.3/22/18 MT 12-4-09
2.35-2.45	0.4	22	22	1.17	
2.400-2.484	0.4	22	22	1.17	
2.4-2.5	0.4	21	21	1.20	
2.45-2.46	0.4	21	21	1.20	