RADITEK

DCS-PCS-UMTS

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WCDMA

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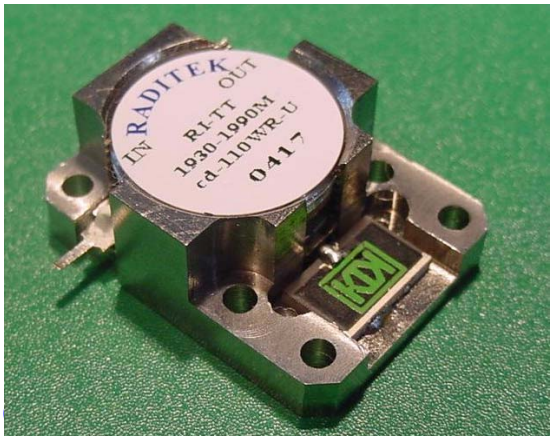
1620-3700MHz ULTRA LOW IMD <80 dBc

RI-TT-cd Isolator-110W-U RC-TT-cc Circulator-100W-U

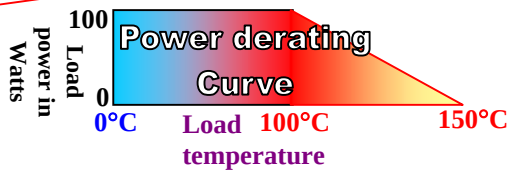


Standard specification examples:

Frequency MHz (F1-F2)	Band	Ins. Loss dB	ISO. dB	Ret. Loss:	VSWR
1805-1880	DCS	0.29	22	21	1.19:1
1930-1990	PCS	0.29	22	21	1.19:1
2.1-2.17G*	UMTS	0.25	22	21	1.19:1
2.3-2.5G*	WCDMA	0.25	22	21	1.19:1

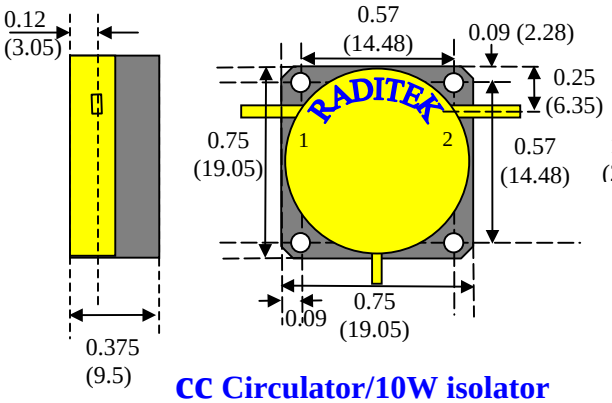
Order as: **RI-SS-F1-F2-cd-110WR-U (example)**

Direction of RF:	
R	default →
L	←

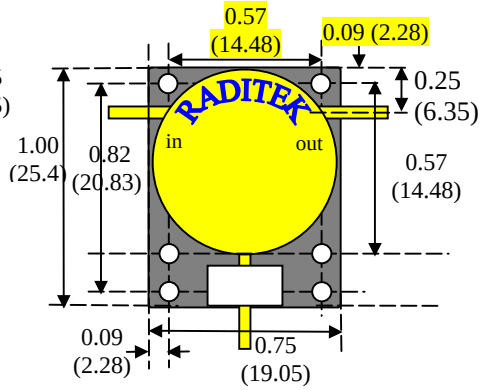


Unit	Length	Width cc/cd	Thickness
Inch	0.09	0.025	0.005
mm	2.29	0.64	0.13

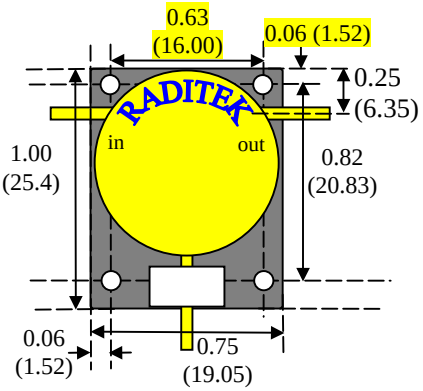
Mounting holes are 0.104" (2.6mm) diameter.
Monitor tab on load is ~ 0.15 (3.8mm) long.



cc Circulator/10W isolator



cd isolator



cdp isolator

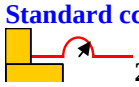
General specifications:		
Max. Fwd power:	**150 Watts**	Average
Max. Rev power (avg): (Load rating)	**110 Watts (cd) 10W (cc)**	Assumes infinite heat sink Load temp to be < 85°C
Peak Power handling	**1000 Watts**	
Operating temp.	-20°C to 85°C	-54°C to 110°C (storage)

Specification Options:

Attenuator type	-A20; -A30	20 dB or 30 dB
Ultra Low Intermodulation.	U	Optimized for best IMD for its size. Typ.: <-80dBc, 2 x 30W tones, 10MHz apart.

Tolerance	.XX	.XXX
Inch	±0.02	±0.010
mm	±0.5	±0.25

Standard cc/cd strain relief: **<1800 MHz**



20 mil ±10 mil radius (0.5±0.25mm)

Machined surface: 63√

Housings are made from Steel

Magnetically shielded,

Nickel plated.

WORLD HQ: 1702H Meridian Ave. Suite 127, San Jose, Ca 95125, U.S.A.
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Table 1 Designed and Tested For Ultra Low IMD

Freq. Hz		Insertion Loss dB Max.	Isolation Min. dB	Ret Loss dB	VSWR	@	
1900-1920M		0.29	21	20.5	1.21	<<<<<<<	
1900-1990M		0.29	22	21	1.19		
1900-2002M		0.30	22	21	1.19		
1910-2010M		0.30	23	20	1.25		
1920-1980M		0.30	23	20	1.25		
1930-1990M		0.29	21	21	1.19		
1950-2050M		0.30	23	20	1.25		
2.07-2.21G	141M	0.35	21	19	1.25		
2.08-2.2G	130M	0.3	21	20	1.22	-10 to 80C	0.25/23/23/1.15 (typ)
2.09-2.19G		0.25	23	19	1.25		
2.1-2.2G		0.3	21	20	1.25		
2.11-2.17G		0.25	22	21	1.20		
2.15-2.35G		0.35	18	18	1.30		
2.2-2.3G		0.30	24	23	1.15		

Table 2 Designed For Ultra Low IMD (Not Tested)

Freq. Hz		Insertion Loss dB Max.	Isolation Min. dB	Ret Loss dB	VSWR	@	
1805-1880M		0.29	22	21	1.19		
1830-1880M		0.3	21	21	1.20		
1840-1870M		0.29	22	21	1.19		
1850-1910M		0.40	20	20	1.25		
1850-1990M		0.40	20	19	1.25	-10 to 85C	0.3/23/1.25 @ RT
1850-2050M		0.50	18	18	1.30	-80 to 85C	
2.2-2.4G		0.30	24	23	1.15		
2.2-2.5G		0.35	24	23	1.15		
2.3-2.4G		0.30	24	23	1.15		
2.3-2.5G		0.30	23	21	1.19		
2.3-2.7G		0.4	20	19	1.25		
2.4-2.5G		0.3	24	23	1.15		
2.4-2.6G		0.35	22	21	1.19		
2.4-2.75G		0.4	20	19	1.25		
2.4-2.8G		0.4	20	19	1.25		
2.5-2.7G		0.35	22	21	1.19		
2.6-2.9G		0.5	20	20	1.22		
2.6-3.0G		0.5	18	18	1.30		
2.7-2.9G		0.4	20	18	1.30		
2.69-2.91G		0.35	21	19	1.25		

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Freq. Hz		Insertion Loss dB Max.	Isolation Min. dB	Ret Loss dB	VSWR	@	
2.7-3.0G		0.38	22	22	1.25		
2.7-3.1G		0.40	22	22	1.25		
2.8-3.2G		0.55	18	18	1.30		
3.0-3.2G		0.4	20	20	1.22		
3.1-3.4G		0.4	20	20	1.25		
3.35-3.65G		0.5	17.5	18			Spec confirmed
3.4-3.6G		0.35	20	19	1.25		
3.5-3.6G		0.35	20	19	1.25		

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