



COMMUNICATION NARROW BAND

FLANGE MOUNT DROP-IN ISOLATORS 2500MHZ TO 15000MHZ

PRODUCT DESCRIPTION

RFCI Drop-in Isolators designed for S, C, X, and Ku band Radar applications in high performance linear power amplifiers.



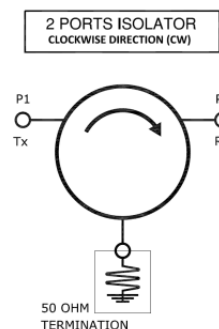
- ❖ Products available with alternative configuration such as attenuators, high power termination and reverse rotation direction.
- ❖ Special Tab is offset available.
- ❖ S-parameters are available upon request.



KEY FEATURES

- Standard drop-in package size.
- Robust Construction for High Reliability performance
- RoHS compliant
- Low typical Insertion loss
- Magnetically Shielded.

FUNCTION DIAGRAM



ISOLATOR OUTLINE DRAWING

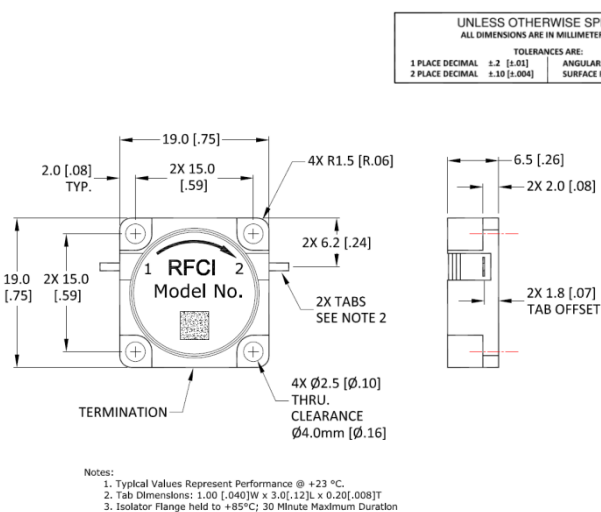


Figure DI-21 (19mm Package Outline-20W)

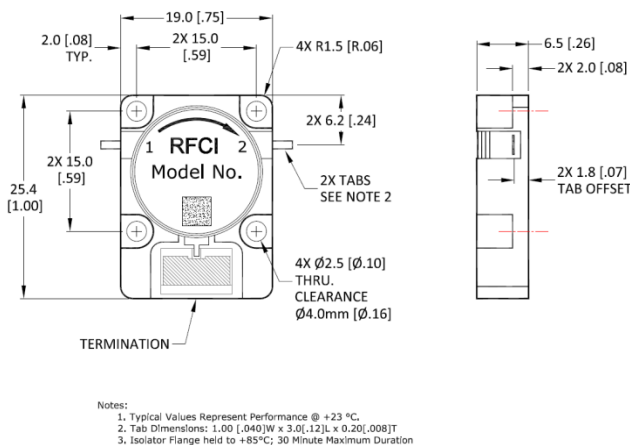


Figure DI-22 (19mm Package Outline-100W)

20W Isolator- 19mm C' Bore Package

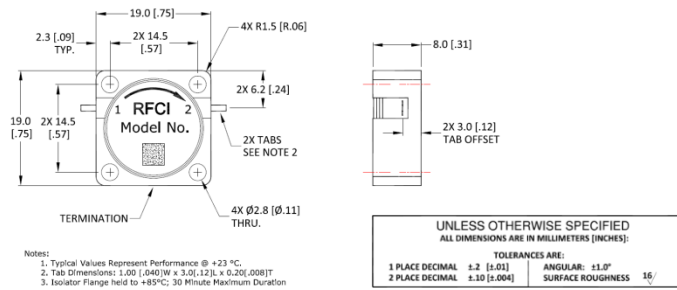
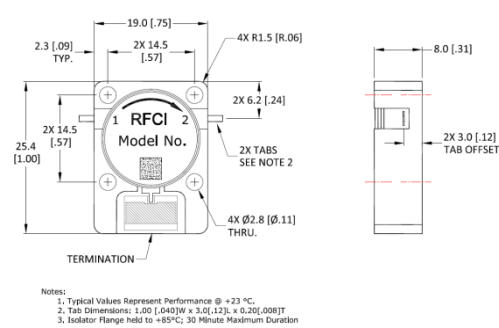
Frequency Range (MHz)		Insertion Loss (dB)	Isolation (dB)	Return Loss (dB)	Fwd. PWR P/CW (W)	Rev PWR CW (W)	Operating Temperature	Package Outline	RFCI Part Number
Low	High	Room/OT	Room/OT	Room/OT	Max.	Max.	(°C)		
2500	2700	0.20/0.30	25/22	25/22	1000/100	20	-40 to +85°C	DI-21	RFSL2852
2700	3300	0.30/0.40	23/20	23/20	1000/100	20	-40 to +85°C	DI-21	RFSL2817
2700	2900	0.20/0.30	25/22	25/22	1000/100	20	-40 to +85°C	DI-21	RFSL2854
2900	3500	0.30/0.40	23/20	23/20	1000/100	20	-40 to +85°C	DI-21	RFSL2856
2900	3100	0.20/0.30	25/22	25/22	1000/100	20	-40 to +85°C	DI-21	RFSL2855
3000	3500	0.25/0.35	23/20	23/20	1000/100	20	-40 to +85°C	DI-21	RFSL2857
3300	3800	0.25/0.35	23/20	23/20	1000/100	20	-40 to +85°C	DI-21	RFSL2859
3300	3500	0.20/0.30	25/22	25/22	1000/100	20	-40 to +85°C	DI-21	RFSL2858
3400	4200	0.30/0.40	23/20	23/20	500/50	20	-20 to +85°C	DI-21	RFSL2873
3400	3700	0.20/0.30	25/22	25/22	1000/100	20	-40 to +85°C	DI-21	RFSL2860
3500	4300	0.30/0.40	23/20	23/20	500/50	20	-20 to +85°C	DI-21	RFSL2874
3600	3800	0.20/0.30	25/22	25/22	1000/100	20	-40 to +85°C	DI-21	RFSL2861

100W Isolator- 19mm C' Bore Package

Frequency Range (MHz)		Insertion Loss (dB)	Isolation (dB)	Return Loss (dB)	Fwd. PWR P/CW (W)	Rev PWR CW (W)	Operating Temperature	Package Outline	RFCI Part Number
Low	High	Room/OT	Room/OT	Room/OT	Max.	Max.	(°C)		
2500	2700	0.20/0.30	25/22	25/22	1000/100	100	-40 to +85°C	DI-22	RFSL2852-T100
2700	3300	0.30/0.40	23/20	23/20	1000/100	100	-40 to +85°C	DI-22	RFSL2817-T100
2700	2900	0.20/0.30	25/22	25/22	1000/100	100	-40 to +85°C	DI-22	RFSL2854-T100
2900	3500	0.30/0.40	23/20	23/20	1000/100	100	-40 to +85°C	DI-22	RFSL2856-T100
2900	3100	0.20/0.30	25/22	25/22	1000/100	100	-40 to +85°C	DI-22	RFSL2855-T100
3000	3500	0.25/0.35	23/20	23/20	1000/100	100	-40 to +85°C	DI-22	RFSL2857-T100
3300	3800	0.25/0.35	23/20	23/20	1000/100	100	-40 to +85°C	DI-22	RFSL2859-T100
3300	3500	0.20/0.30	25/22	25/22	1000/100	100	-40 to +85°C	DI-22	RFSL2858-T100
3400	3700	0.20/0.30	25/22	25/22	1000/100	100	-40 to +85°C	DI-22	RFSL2860-T100
3600	3800	0.20/0.30	25/22	25/22	1000/100	100	-40 to +85°C	DI-22	RFSL2861-T100

Standard Part Number is Clockwise (CW) Rotation. Add letter "R" at the end to Part number for a Counter Clockwise (CCW) Rotation

- See RFCI website www.rf-ci.com for complete part datasheet.

Figure DI-23 (19mm Package Outline-20W)

Figure DI-24 (19mm Package Outline-100W)


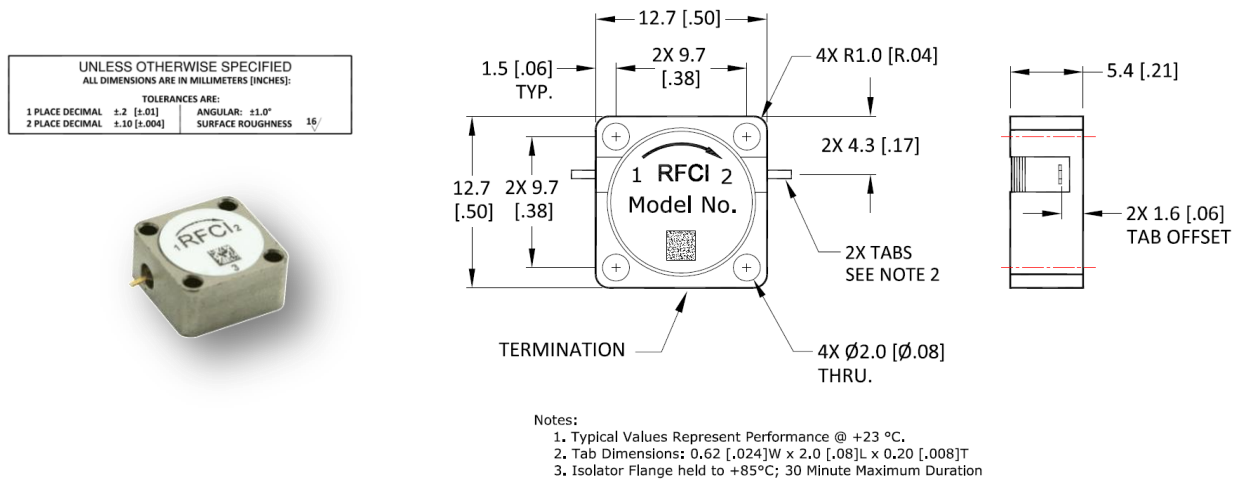
20W Isolator- 19mm Thick Package

Frequency Range (MHz)		Insertion Loss (dB)	Isolation (dB)	Return Loss (dB)	Fwd. PWR P/CW (W)	Rev PWR CW (W)	Operating Temperature	Package Outline	RFCI Part Number
Low	High	Room/OT	Room/OT	Room/OT	Max.	Max.	(°C)		
2500	2700	0.20/0.30	25/22	25/22	1000/100	20	-40 to +85°C	DI-23	RFSL2852D
2700	3300	0.30/0.40	23/20	23/20	1000/100	20	-40 to +85°C	DI-23	RFSL2817D
2700	2900	0.20/0.30	25/22	25/22	1000/100	20	-40 to +85°C	DI-23	RFSL2854D
2900	3500	0.30/0.40	23/20	23/20	1000/100	20	-40 to +85°C	DI-23	RFSL2856D
2900	3100	0.20/0.30	25/22	25/22	1000/100	20	-40 to +85°C	DI-23	RFSL2855D
3000	3500	0.25/0.35	23/20	23/20	1000/100	20	-40 to +85°C	DI-23	RFSL2857D
3300	3800	0.25/0.35	23/20	23/20	1000/100	20	-40 to +85°C	DI-23	RFSL2859D
3300	3500	0.20/0.30	25/22	25/22	1000/100	20	-40 to +85°C	DI-23	RFSL2858D
3400	3700	0.20/0.30	25/22	25/22	1000/100	20	-40 to +85°C	DI-23	RFSL2860D
3600	3800	0.20/0.30	25/22	25/22	1000/100	20	-40 to +85°C	DI-23	RFSL2861D

100W Isolator- 19mm Thick Package

Frequency Range (MHz)		Insertion Loss (dB)	Isolation (dB)	Return Loss (dB)	Fwd. PWR P/CW (W)	Rev PWR CW (W)	Operating Temperature	Package Outline	RFCI Part Number
Low	High	Room/OT	Room/OT	Room/OT	Max.	Max.	(°C)		
2500	2700	0.20/0.30	25/22	25/22	1000/100	100	-40 to +85°C	DI-24	RFSL2852D-T100
2700	3300	0.30/0.40	23/20	23/20	1000/100	100	-40 to +85°C	DI-24	RFSL2817D-T100
2700	2900	0.20/0.30	25/22	25/22	1000/100	100	-40 to +85°C	DI-24	RFSL2854D-T100
2900	3500	0.30/0.40	23/20	23/20	1000/100	100	-40 to +85°C	DI-24	RFSL2856D-T100
2900	3100	0.20/0.30	25/22	25/22	1000/100	100	-40 to +85°C	DI-24	RFSL2855D-T100
3000	3500	0.25/0.35	23/20	23/20	1000/100	100	-40 to +85°C	DI-24	RFSL2857D-T100
3300	3800	0.25/0.35	23/20	23/20	1000/100	100	-40 to +85°C	DI-24	RFSL2859D-T100
3300	3500	0.20/0.30	25/22	25/22	1000/100	100	-40 to +85°C	DI-24	RFSL2858D-T100
3400	3700	0.20/0.30	25/22	25/22	1000/100	100	-40 to +85°C	DI-24	RFSL2860D-T100
3600	3800	0.20/0.30	25/22	25/22	1000/100	100	-40 to +85°C	DI-24	RFSL2861D-T100

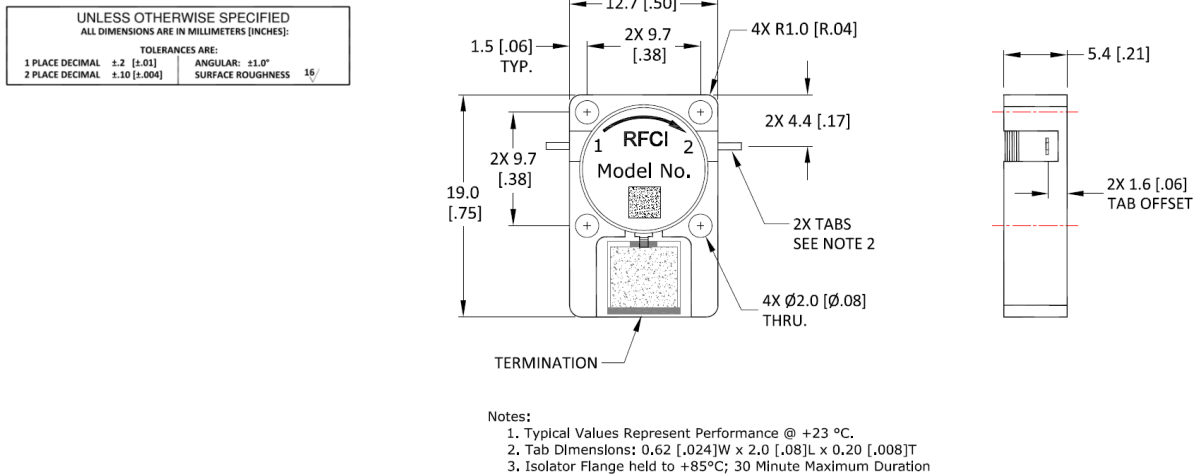
Figure DI-27 (12.7mm Thick Package Outline-10W)



Isolator, 12.7mm Thick Package

Frequency Range (MHz)		Insertion Loss (dB)	Isolation (dB)	Return Loss (dB)	Fwd. PWR P/CW (W)	Rev PWR CW (W)	Operating Temperature (°C)	Package Outline	RFCI Part Number
Low	High	Room/OT	Room/OT	Room/OT	Max.	Max.			
3600	4200	0.40/0.55	20/19	20/19	500/50	10	-40 to +85°C	DI-27	RFSL2945D
3600	3800	0.30/0.40	22/20	23/20	500/50	10	-40 to +85°C	DI-27	RFSL2921D
4000	4700	0.35/0.45	21/20	23/20	500/50	10	-40 to +85°C	DI-27	RFSL2886D
4200	4400	0.30/0.35	23/20	23/20	500/35	10	-40 to +85°C	DI-27	RFSL2875D
4400	5000	0.30/0.35	23/20	23/20	500/35	10	-40 to +85°C	DI-27	RFSL2876D
4700	5200	0.30/0.35	23/20	23/20	500/35	10	-40 to +85°C	DI-27	RFSL2887D
4900	6100	0.30/0.40	23/20	23/20	500/35	10	-40 to +85°C	DI-27	RFSL2877D
5000	6500	0.45/0.50	20/17	20/17	500/35	10	-40 to +85°C	DI-27	RFSL2878D
5400	5900	0.30/0.35	22/20	22/20	500/35	10	-40 to +85°C	DI-27	RFSL2879D
5800	7100	0.35/0.40	21/20	21/20	500/35	10	-40 to +85°C	DI-27	RFSL2940D
5800	6700	0.35/0.40	22/20	22/20	500/35	10	-40 to +85°C	DI-27	RFSL2880D
6400	7200	0.35/0.40	22/20	22/20	500/35	10	-40 to +85°C	DI-27	RFSL2881D
6500	8500	0.45/0.50	22/20	22/20	500/35	10	-40 to +85°C	DI-27	RFSL2882D
7000	8000	0.35/0.40	22/20	22/20	500/35	10	-40 to +85°C	DI-27	RFSL2941D
7200	8400	0.30/0.35	23/20	23/20	500/35	10	-40 to +85°C	DI-27	RFSL2883D
7700	8800	0.35/0.40	21/20	21/20	500/35	10	-40 to +85°C	DI-27	RFSL2942D
8000	10500	0.35/0.50	22/18	22/18	500/35	5	-40 to +85°C	DI-27	RFSL2901D
8300	8800	0.30/0.35	23/20	23/20	500/35	10	-40 to +85°C	DI-27	RFSL2884D
9000	9600	0.30/0.40	23/20	23/20	500/35	10	-40 to +85°C	DI-27	RFSL2885D
9200	9800	0.30/0.40	23/20	23/20	500/35	10	-40 to +85°C	DI-27	RFSL2892D
9000	11000	0.45/0.50	22/19	22/19	500/35	5	-40 to +85°C	DI-27	RFSL2946D
10000	11700	0.35/0.40	21/20	21/20	500/35	5	-40 to +85°C	DI-27	RFSL2943D
12000	15000	0.40/0.50	21/19	21/19	500/35	5	-40 to +85°C	DI-27	RFSL2944D

Figure DI-30 (12.7mm Thick Package Outline-40W)



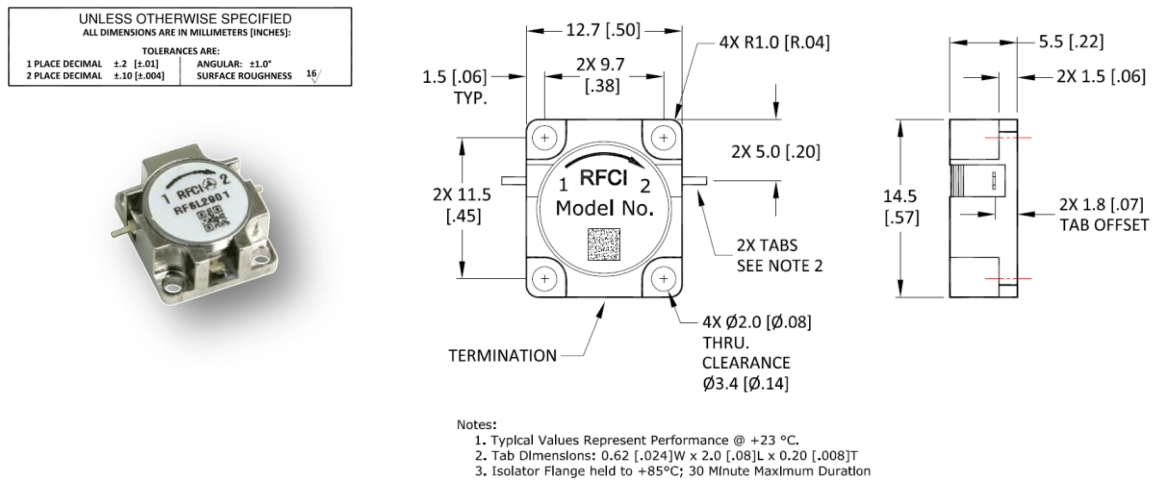
40W Isolator, 12.7mm Thick Package

Frequency Range (MHz)		Insertion Loss (dB)	Isolation (dB)	Return Loss (dB)	Fwd. PWR P/CW (W)	Rev PWR CW (W)	Operating Temperature (°C)	Package Outline	RFCI Part Number
Low	High	Room/OT	Room/OT	Room/OT	Max.	Max.			
3600	4200	0.40/0.55	20/19	20/19	500/50	40	-40 to +85°C	DI-30	RFSL2945D-T40
3600	3800	0.30/0.40	22/20	23/20	500/50	40	-40 to +85°C	DI-30	RFSL2921D-T40
4000	4700	0.35/0.45	21/20	23/20	500/50	40	-40 to +85°C	DI-30	RFSL2886D-T40
4200	4400	0.35/0.40	21/20	23/20	500/50	40	-40 to +85°C	DI-30	RFSL2875D-T40
4400	5000	0.35/0.40	21/20	23/20	500/50	40	-40 to +85°C	DI-30	RFSL2876D-T40
4700	5200	0.40/0.50	21/20	23/20	500/50	40	-40 to +85°C	DI-30	RFSL2887D-T40
4900	6100	0.40/0.50	21/20	23/20	500/50	40	-40 to +85°C	DI-30	RFSL2877D-T40
5000	6500	0.50/0.60	18/17	20/17	500/50	40	-40 to +85°C	DI-30	RFSL2878D-T40
5400	5900	0.40/0.50	21/20	22/20	500/50	40	-40 to +85°C	DI-30	RFSL2879D-T40
5800	7100	0.40/0.50	21/20	21/20	500/50	40	-40 to +85°C	DI-30	RFSL2940D-T40
5800	6700	0.40/0.50	20/19	22/20	500/50	40	-40 to +85°C	DI-30	RFSL2880D-T40
6400	7200	0.40/0.50	20/19	22/20	500/50	40	-40 to +85°C	DI-30	RFSL2881D-T40

Standard Part Number is Clockwise (CW) Rotation. Add letter “R” at the end to Part number for a Counter Clockwise (CCW) Rotation

- See RFCI website www.rf-ci.com for complete part datasheet.

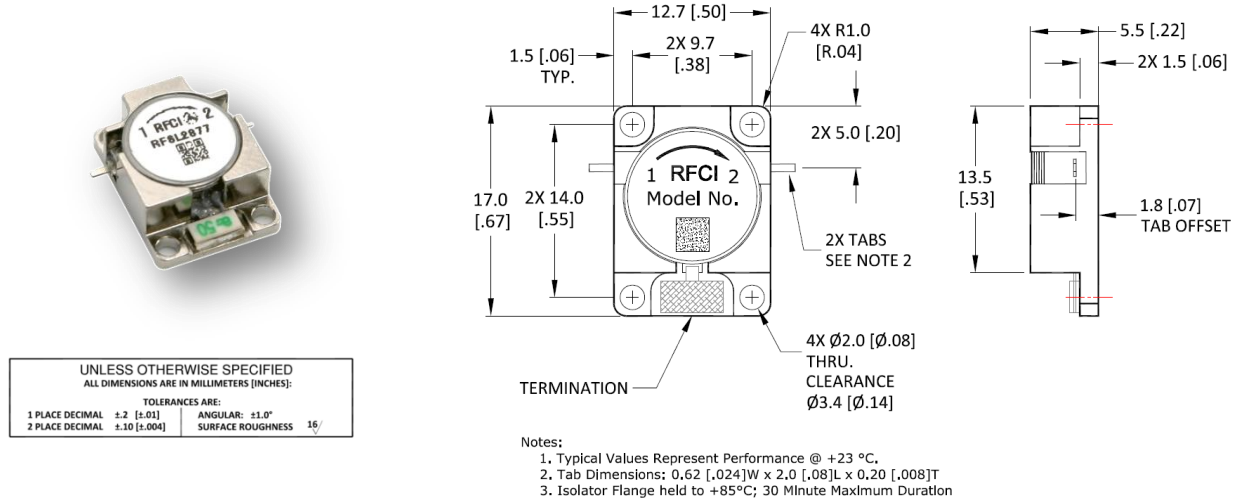
Figure DI-28 (12.7mm C' Bore Package Outline-2W)



Low Power Isolator, 12.7mm C' Bore Package

Frequency Range (MHz)		Insertion Loss (dB)	Isolation (dB)	Return Loss (dB)	Fwd. PWR P/CW (W)	Rev PWR CW (W)	Operating Temperature (°C)	Package Outline	RFCL Part Number
Low	High	Room/OT	Room/OT	Room/OT					
3600	4200	0.35/0.50	20/19	20/19	500/35	2	-40 to +85°C	DI-28	RFSL2945-T2
3600	3800	0.25/0.35	23/20	23/20	500/35	2	-40 to +85°C	DI-28	RFSL2921-T2
4000	4700	0.30/0.40	23/20	23/20	500/35	2	-40 to +85°C	DI-28	RFSL2886-T2
4200	4400	0.30/0.35	23/20	23/20	500/35	2	-40 to +85°C	DI-28	RFSL2875-T2
4400	5000	0.30/0.35	23/20	23/20	500/35	2	-40 to +85°C	DI-28	RFSL2876-T2
4700	5200	0.30/0.35	23/20	23/20	500/35	2	-40 to +85°C	DI-28	RFSL2887-T2
4900	6100	0.30/0.40	23/20	23/20	500/35	2	-40 to +85°C	DI-28	RFSL2877-T2
5000	6500	0.45/0.50	20/17	20/17	500/35	2	-40 to +85°C	DI-28	RFSL2878-T2
5400	5900	0.30/0.35	22/20	22/20	500/35	2	-40 to +85°C	DI-28	RFSL2879-T2
5800	7100	0.35/0.40	21/20	21/20	500/35	2	-40 to +85°C	DI-28	RFSL2940-T2
5800	6700	0.35/0.40	22/20	22/20	500/35	2	-40 to +85°C	DI-28	RFSL2880-T2
6400	7200	0.35/0.40	22/20	22/20	500/35	2	-40 to +85°C	DI-28	RFSL2881-T2
6500	8500	0.45/0.50	22/20	22/20	500/35	2	-40 to +85°C	DI-28	RFSL2882-T2
7000	8000	0.35/0.40	22/20	22/20	500/35	2	-40 to +85°C	DI-28	RFSL2941-T2
7200	8400	0.30/0.35	23/20	23/20	500/35	2	-40 to +85°C	DI-28	RFSL2883-T2
7700	8800	0.35/0.40	21/20	21/20	500/35	2	-40 to +85°C	DI-28	RFSL2942-T2
8300	8800	0.30/0.35	23/20	23/20	500/35	2	-40 to +85°C	DI-28	RFSL2884-T2
9000	9600	0.30/0.40	23/20	23/20	500/35	2	-40 to +85°C	DI-28	RFSL2885-T2
9200	9800	0.30/0.40	23/20	23/20	500/35	2	-40 to +85°C	DI-28	RFSL2892-T2
8000	10500	0.35/0.50	22/18	22/18	500/35	2	-40 to +85°C	DI-28	RFSL2901
9000	11000	0.45/0.50	22/19	22/19	500/35	2	-40 to +85°C	DI-28	RFSL2946
10000	11700	0.35/0.40	21/20	21/20	500/35	2	-40 to +85°C	DI-28	RFSL2943
12000	15000	0.40/0.50	21/19	21/19	500/35	2	-40 to +85°C	DI-28	RFSL2944

Figure DI-29 (12.7mm C' Bore Package Outline-10W-20W)



Isolator, 12.7mm C' Bore Package

Frequency Range (MHz)		Insertion Loss (dB)	Isolation (dB)	Return Loss (dB)	Fwd. PWR P/CW (W)	Rev PWR CW (W)	Operating Temperature	Package Outline	RFCI Part Number
Low	High	Room/OT	Room/OT	Room/OT	(°C)				
3600	4200	0.35/0.50	20/19	20/19	500/35	20	-40 to +85°C	DI-29	RFSL2945
3600	3800	0.25/0.35	23/20	23/20	500/35	20	-40 to +85°C	DI-29	RFSL2921
4000	4700	0.30/0.40	23/20	23/20	500/35	20	-40 to +85°C	DI-29	RFSL2886
4200	4400	0.30/0.35	23/20	23/20	500/35	20	-40 to +85°C	DI-29	RFSL2875
4400	5000	0.30/0.35	23/20	23/20	500/35	20	-40 to +85°C	DI-29	RFSL2876
4700	5200	0.30/0.35	23/20	23/20	500/35	20	-40 to +85°C	DI-29	RFSL2887
4900	6100	0.30/0.40	23/20	23/20	500/35	20	-40 to +85°C	DI-29	RFSL2877
5000	6500	0.45/0.50	20/17	20/17	500/35	20	-40 to +85°C	DI-29	RFSL2878
5400	5900	0.30/0.35	22/20	22/20	500/35	10	-40 to +85°C	DI-29	RFSL2879
5800	7100	0.35/0.40	21/20	21/20	500/35	10	-40 to +85°C	DI-29	RFSL2940
5800	6700	0.35/0.40	22/20	22/20	500/35	10	-40 to +85°C	DI-29	RFSL2880
6400	7200	0.35/0.40	22/20	22/20	500/35	10	-40 to +85°C	DI-29	RFSL2881
6500	8500	0.45/0.50	22/20	22/20	500/35	10	-40 to +85°C	DI-29	RFSL2882
7000	8000	0.35/0.40	22/20	22/20	500/35	10	-40 to +85°C	DI-29	RFSL2941
7200	8400	0.30/0.35	23/20	23/20	500/35	10	-40 to +85°C	DI-29	RFSL2883
7700	8800	0.35/0.40	21/20	21/20	500/35	10	-40 to +85°C	DI-29	RFSL2942
8300	8800	0.30/0.35	23/20	23/20	500/35	10	-40 to +85°C	DI-29	RFSL2884
9000	9600	0.30/0.40	23/20	23/20	500/35	10	-40 to +85°C	DI-29	RFSL2885
9200	9800	0.30/0.40	23/20	23/20	500/35	10	-40 to +85°C	DI-29	RFSL2892

- See RFCI website www.rf-ci.com for complete part datasheet.