

# COAXIAL BROAD BANDS

## SMA BROAD BANDS ISOLATORS

### PRODUCT DESCRIPTION

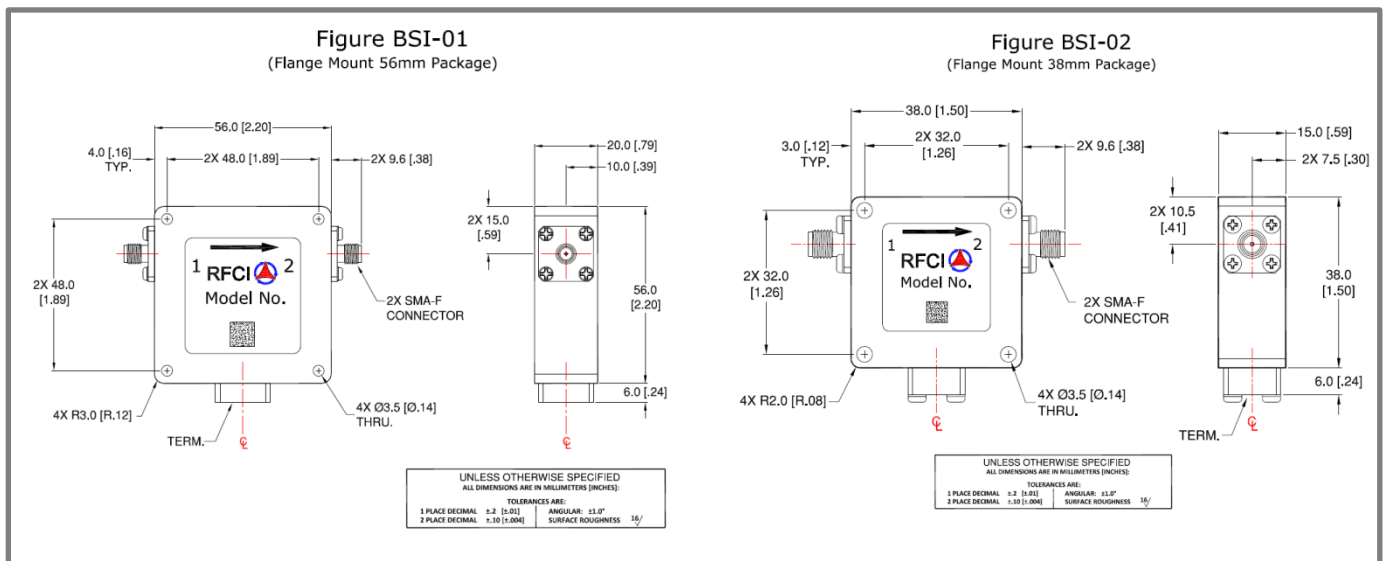
RF CI has developed a series Coaxial Isolators specifically designed for each frequency band to be a compromise among size, electrical performance and cost. All standard devices are supplied with Female connector.



- ❖ SMA Female is Standard Products. Available with alternative configuration such as male connectors, high power termination and reverse rotation direction.
- ❖ S-parameters are available upon request.



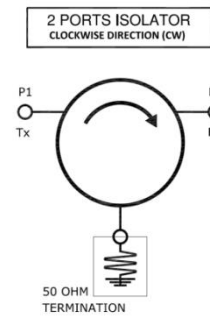
### ISOLATOR OUTLINE DRAWING



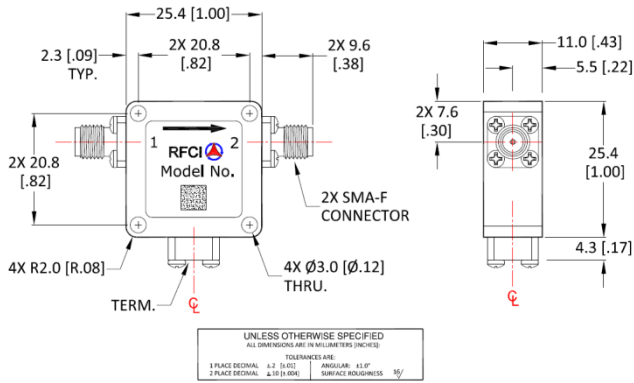
### KEY FEATURES

- Package Isolator with Mounting Holes designed to be mounted with standard hardware
- Robust Construction for High Reliability performance
- RoHS compliant
- Low typical Insertion loss, High Isolation
- Magnetically Shielded.

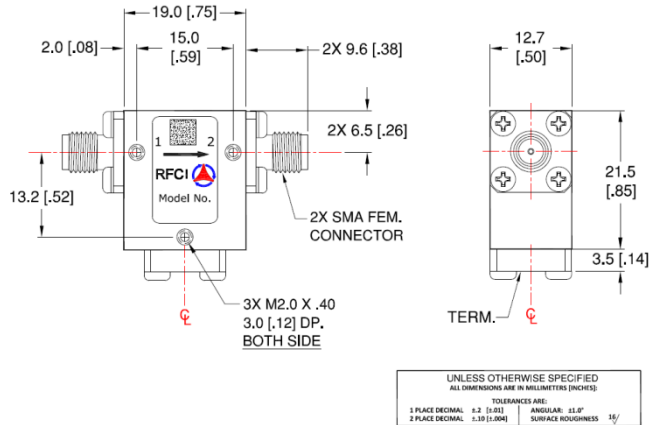
### FUNCTION DIAGRAM



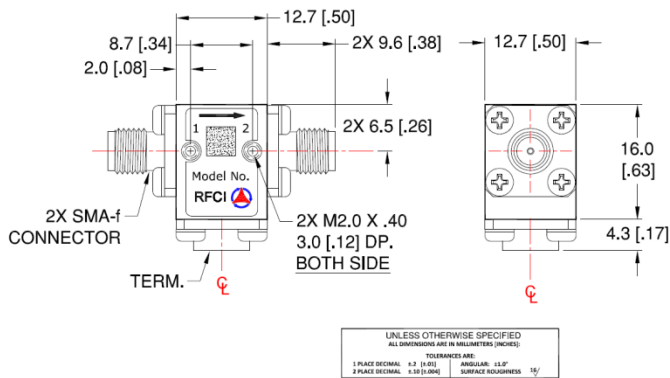
**Figure BSI-03**  
(Flange Mount 25.4mm Package)



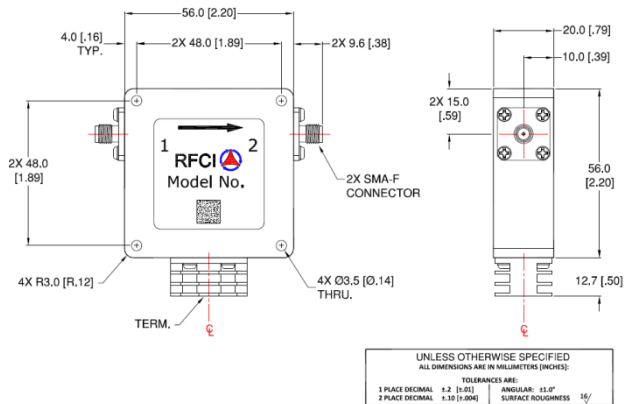
**Figure BSI-04**  
(Flange Mount 19mm Package)



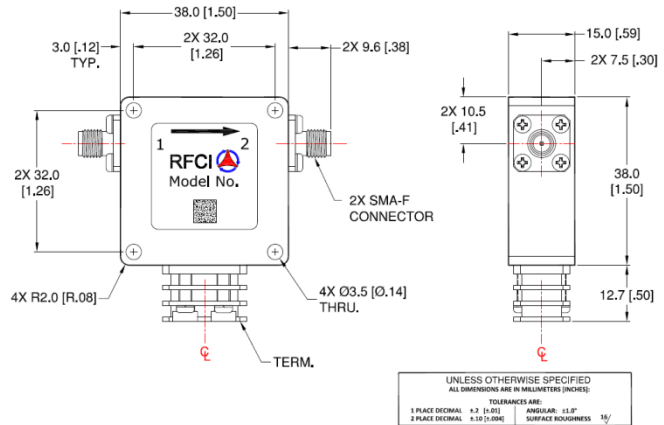
**Figure BSI-05**  
(Flange Mount 12.7mm Package)



**Figure BSI-06**  
(Flange Mount 56mm Package)



**Figure BSI-07**  
(Flange Mount 38mm Package)



## 20 Watts SMA Broad Bands Isolator

Frequency Range (MHz)		Insertion Loss (dB)	Isolation (dB)	Return Loss (dB)	Fwd. PWR P/CW (W)	Rev PWR CW (W)	Operating Temperature	Package Outline FIG.	RFCI Part No.
Low	High	Room/OT	Room/OT	Room/OT	Max.	Max.	(°C)		
<b>800</b>	<b>2000</b>	0.60/0.85	16/14.5	16/14.5	500/50	20	-0 to +50°C	BSI-01	<b>RFSL8458</b>
<b>800</b>	<b>1400</b>	0.50/0.60	16/15	16/15	500/50	20	-0 to +50°C	BSI-01	<b>RFSL8461</b>
<b>900</b>	<b>1500</b>	0.40/0.60	20/19	20/19	500/50	20	-0 to +50°C	BSI-01	<b>RFSL8462</b>
<b>1000</b>	<b>2000</b>	0.50/0.70	19/17	19/17	500/50	20	-0 to +50°C	BSI-01	<b>RFSL8452</b>
<b>1250</b>	<b>2500</b>	0.50/0.70	19/17	19/17	500/50	20	-0 to +50°C	BSI-01	<b>RFSL8551</b>
<b>1300</b>	<b>2600</b>	0.50/0.70	19/17	19/17	500/50	20	-0 to +50°C	BSI-01	<b>RFSL8553</b>
<b>1350</b>	<b>2700</b>	0.50/0.70	19/17	19/17	500/50	20	-0 to +50°C	BSI-01	<b>RFSL8555</b>
<b>1500</b>	<b>3000</b>	0.50/0.70	19/17	19/17	500/50	20	-10 to +65°C	BSI-02	<b>RFSL8753</b>
<b>1600</b>	<b>3200</b>	0.50/0.70	19/17	19/17	500/50	20	-10 to +65°C	BSI-02	<b>RFSL8755</b>
<b>1500</b>	<b>4000</b>	0.80/1.00	15/14	15/14	500/50	20	-10 to +65°C	BSI-02	<b>RFSL8759</b>
<b>1700</b>	<b>4200</b>	0.50/0.70	16/15	16/15	500/50	20	-10 to +65°C	BSI-02	<b>RFSL8757</b>
<b>2000</b>	<b>6000</b>	1.00/1.40	13/12.5	13/12.5	500/50	20	-20 to +65°C	BSI-02	<b>RFSL8951</b>
<b>2000</b>	<b>4000</b>	0.50/0.70	19/17	19/17	500/50	20	-20 to +85°C	BSI-02	<b>RFSL8851</b>
<b>2000</b>	<b>3000</b>	0.40/0.50	21/20	21/20	500/50	20	-20 to +85°C	BSI-02	<b>RFSL8865</b>
<b>2100</b>	<b>4200</b>	0.50/0.70	19/17	19/17	500/50	20	-20 to +85°C	BSI-02	<b>RFSL8856</b>
<b>2300</b>	<b>6000</b>	0.70/0.80	15/14	15/14	500/50	20	-20 to +85°C	BSI-02	<b>RFSL8986</b>
<b>2500</b>	<b>6200</b>	0.80/1.00	14/13	14/13	500/50	20	-20 to +85°C	BSI-02	<b>RFSL8866</b>
<b>2500</b>	<b>5500</b>	0.60/0.80	16/15	16/15	500/50	20	-20 to +85°C	BSI-02	<b>RFSL8867</b>
<b>2500</b>	<b>5000</b>	0.50/0.70	19/17	19/17	500/50	20	-20 to +85°C	BSI-02	<b>RFSL8858</b>
<b>2600</b>	<b>5200</b>	0.50/0.70	19/17	19/17	500/50	20	-20 to +85°C	BSI-02	<b>RFSL8862</b>
<b>2700</b>	<b>6200</b>	0.60/0.80	16/15	16/15	500/50	20	-20 to +85°C	BSI-02	<b>RFSL8987</b>
<b>3000</b>	<b>6000</b>	0.50/0.70	19/18	19/18	500/50	20	-20 to +85°C	BSI-03	<b>RFSL8954</b>
<b>3200</b>	<b>6400</b>	0.50/0.60	19/18	19/18	500/50	20	-20 to +85°C	BSI-03	<b>RFSL8958</b>
<b>3500</b>	<b>7000</b>	0.50/0.60	19/18	19/18	500/50	20	-20 to +85°C	BSI-03	<b>RFSL8959</b>
<b>3600</b>	<b>8600</b>	0.60/0.70	17/16	17/16	500/30	20	-20 to +85°C	BSI-03	<b>RFSL8961</b>

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

## SMA Broad Bands Isolator

Frequency Range (MHz)		Insertion Loss (dB)	Isolation (dB)	Return Loss (dB)	Fwd. PWR P/CW (W)	Rev PWR CW (W)	Operating Temperature	Package Outline FIG.	RFCI Part No.
Low	High	Room/OT	Room/OT	Room/OT	Max.	Max.	(°C)		
<b>4000</b>	<b>10000</b>	0.60/0.70	16/15	16/15	250/30	10	-20 to +85°C	BSI-04	<b>RFSL8964</b>
<b>4000</b>	<b>9000</b>	0.50/0.60	17/16	17/16	250/30	10	-20 to +85°C	BSI-04	<b>RFSL8963</b>
<b>4000</b>	<b>8000</b>	0.50/0.60	19/17	19/17	250/30	20	-40 to +85°C	BSI-04	<b>RFSL8962</b>
<b>4500</b>	<b>9000</b>	0.50/0.60	19/17	19/17	250/30	10	-40 to +85°C	BSI-04	<b>RFSL8965</b>
<b>4700</b>	<b>9700</b>	0.50/0.60	17/16	17/16	250/30	10	-40 to +85°C	BSI-04	<b>RFSL8966</b>
<b>5000</b>	<b>10000</b>	0.50/0.60	19/17	19/17	250/25	10	-40 to +85°C	BSI-04	<b>RFSL8967</b>
<b>5200</b>	<b>10400</b>	0.50/0.60	19/17	19/17	250/25	10	-40 to +85°C	BSI-04	<b>RFSL8968</b>
<b>5300</b>	<b>12700</b>	0.70/0.80	16/15	16/15	250/25	10	-20 to +85°C	BSI-04	<b>RFSL8969</b>
<b>5500</b>	<b>11000</b>	0.50/0.60	19/17	19/17	250/25	10	-40 to +85°C	BSI-04	<b>RFSL8970</b>
<b>6000</b>	<b>12000</b>	0.50/0.60	19/17	19/17	250/25	10	-40 to +85°C	BSI-04	<b>RFSL8971</b>
<b>6500</b>	<b>16500</b>	0.80/1.00	14/13	14/13	250/25	5	-40 to +85°C	BSI-04	<b>RFSL8974</b>
<b>6500</b>	<b>13000</b>	0.50/0.60	19/17	19/17	250/25	5	-40 to +85°C	BSI-04	<b>RFSL8973</b>
<b>7000</b>	<b>17000</b>	0.90/1.00	14/13	14/13	250/25	5	-40 to +85°C	BSI-04	<b>RFSL8977</b>
<b>7000</b>	<b>14000</b>	0.60/0.70	19/17	19/17	250/25	5	-40 to +85°C	BSI-04	<b>RFSL8976</b>
<b>7000</b>	<b>12400</b>	0.50/0.60	20/19	20/19	250/25	5	-40 to +85°C	BSI-04	<b>RFSL8975</b>
<b>7500</b>	<b>16000</b>	0.70/0.80	16/15	16/15	250/25	5	-40 to +85°C	BSI-04	<b>RFSL8979</b>
<b>7500</b>	<b>15000</b>	0.60/0.70	19/17	19/17	250/25	5	-40 to +85°C	BSI-04	<b>RFSL8978</b>
<b>8000</b>	<b>16000</b>	0.60/0.70	19/17	19/17	250/15	2	-40 to +85°C	BSI-05	<b>RFSL8985</b>
<b>8000</b>	<b>12400</b>	0.50/0.60	21/20	21/20	250/15	2	-40 to +85°C	BSI-05	<b>RFSL8980</b>
<b>8000</b>	<b>18000</b>	0.80/0.90	16/15	16/15	250/15	2	-40 to +85°C	BSI-05	<b>RFSL8984</b>
<b>8500</b>	<b>18500</b>	0.80/0.90	16/15	16/15	250/15	2	-40 to +85°C	BSI-05	<b>RFSL8990</b>
<b>9000</b>	<b>18000</b>	0.60/0.70	19/17	19/17	250/15	2	-40 to +85°C	BSI-05	<b>RFSL8991</b>
<b>10000</b>	<b>20000</b>	0.70/0.90	16/15	16/15	250/15	2	-40 to +85°C	BSI-05	<b>RFSL8988</b>
<b>10000</b>	<b>15000</b>	0.50/0.60	21/19	21/19	250/15	2	-40 to +85°C	BSI-05	<b>RFSL8992</b>
<b>11000</b>	<b>18000</b>	0.60/0.70	19/17	19/17	250/15	2	-40 to +85°C	BSI-05	<b>RFSL8993</b>
<b>12400</b>	<b>18000</b>	0.50/0.60	21/19	21/19	250/15	2	-40 to +85°C	BSI-05	<b>RFSL8982</b>

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

## 50 Watts SMA Broad Bands Isolator

Frequency Range (MHz)		Insertion Loss (dB)		Return Loss (dB)	Fwd. PWR P/CW (W)	Rev PWR CW (W)	Operating Temperature (°C)	Package Outline FIG.	RFCI Part No.
Low	High	Room/OT	Room/OT	Room/OT	Max.	Max.			
<b>800</b>	<b>2000</b>	0.60/0.85	16/14.5	16/14.5	500/50	50	-0 to +50°C	<b>BSI-06</b>	<b>RFSL8458-T50</b>
<b>800</b>	<b>1400</b>	0.50/0.60	16/15	16/15	500/50	50	-0 to +50°C	<b>BSI-06</b>	<b>RFSL8461-T50</b>
<b>900</b>	<b>1500</b>	0.40/0.60	20/19	20/19	500/50	50	-0 to +50°C	<b>BSI-06</b>	<b>RFSL8462-T50</b>
<b>1000</b>	<b>2000</b>	0.50/0.70	19/17	19/17	500/50	50	-0 to +50°C	<b>BSI-06</b>	<b>RFSL8452-T50</b>
<b>1250</b>	<b>2500</b>	0.50/0.70	19/17	19/17	500/50	50	-0 to +50°C	<b>BSI-06</b>	<b>RFSL8551-T50</b>
<b>1300</b>	<b>2600</b>	0.50/0.70	19/17	19/17	500/50	50	-0 to +50°C	<b>BSI-06</b>	<b>RFSL8553-T50</b>
<b>1350</b>	<b>2700</b>	0.50/0.70	19/17	19/17	500/50	50	-0 to +50°C	<b>BSI-06</b>	<b>RFSL8555-T50</b>
<b>1500</b>	<b>3000</b>	0.50/0.70	19/17	19/17	500/50	50	-10 to +65°C	<b>BSI-07</b>	<b>RFSL8753-T50</b>
<b>1600</b>	<b>3200</b>	0.50/0.70	19/17	19/17	500/50	50	-10 to +65°C	<b>BSI-07</b>	<b>RFSL8755-T50</b>
<b>1500</b>	<b>4000</b>	0.80/1.00	15/14	15/14	500/50	50	-10 to +65°C	<b>BSI-07</b>	<b>RFSL8759-T50</b>
<b>1700</b>	<b>4200</b>	0.50/0.70	16/15	16/15	500/50	50	-10 to +65°C	<b>BSI-07</b>	<b>RFSL8757-T50</b>
<b>2000</b>	<b>6000</b>	1.00/1.40	13/12.5	13/12.5	500/50	50	-20 to +65°C	<b>BSI-07</b>	<b>RFSL8951-T50</b>
<b>2000</b>	<b>4000</b>	0.50/0.70	19/17	19/17	500/50	50	-20 to +85°C	<b>BSI-07</b>	<b>RFSL8851-T50</b>
<b>2000</b>	<b>3000</b>	0.40/0.50	21/20	21/20	500/50	50	-20 to +85°C	<b>BSI-07</b>	<b>RFSL8865-T50</b>
<b>2100</b>	<b>4200</b>	0.50/0.70	19/17	19/17	500/50	50	-20 to +85°C	<b>BSI-07</b>	<b>RFSL8856-T50</b>
<b>2300</b>	<b>6000</b>	0.70/0.80	15/14	15/14	500/50	50	-20 to +85°C	<b>BSI-07</b>	<b>RFSL8986-T50</b>
<b>2500</b>	<b>6200</b>	0.80/1.00	14/13	14/13	500/50	50	-20 to +85°C	<b>BSI-07</b>	<b>RFSL8866-T50</b>
<b>2500</b>	<b>5500</b>	0.60/0.80	16/15	16/15	500/50	50	-20 to +85°C	<b>BSI-07</b>	<b>RFSL8867-T50</b>
<b>2500</b>	<b>5000</b>	0.50/0.70	19/17	19/17	500/50	50	-20 to +85°C	<b>BSI-07</b>	<b>RFSL8858-T50</b>
<b>2600</b>	<b>5200</b>	0.50/0.70	19/17	19/17	500/50	50	-20 to +85°C	<b>BSI-07</b>	<b>RFSL8862-T50</b>
<b>2700</b>	<b>6200</b>	0.60/0.80	16/15	16/15	500/50	50	-20 to +85°C	<b>BSI-07</b>	<b>RFSL8987-T50</b>

Standard Part Number is SMA Female and 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](http://www.rf-ci.com) for complete part datasheet.