



**POWER-POLE® NOTCH** Filters offer improved performance and power handling over our MINI and MAXI-NOTCH Filters.

For interface and mechanical outline, please refer to the bandpass POWER-POLE® section.

### POWER-POLE® NOTCH SERIES

#### Specifications:

<b>Frequency Coverage (3 bands):</b>	<b>30 to 90 MHz</b>
Input/Output Impedance:	50Ω
Passband Input/Output VSWR:	2:1 max.
Notch RF Power Handling:	2 Watt
Passband RF Power Handling:	(offset dependent) > 50 Watts @ ± 20% offset typical
Notch Depth:	20 dBm
3 dB Bandwidth:	4% typical
Passband IL:	< 1 dB
Passband IP3:	+50 dBm (input, f <sub>0</sub> > 30 MHz)
Center Frequency Drift:	-80 PPM/°C
Tuning Control:	8 bit parallel
Tuning Speed:	20 μS
DC Power Consumption (Static):	+5 VDC @ 400 mA to 1.5 A
Operating Temperature Range:	-40°C to +65°C
Size:	2.6 × 3.0 × 4.0 (in.) / 66.7 × 76.2 × 101.6 (mm.)
Weight:	18.7 oz. / 530.1 g. / .5 kg.
RF Connection:	SMA jack

#### Pinout & Ratings:

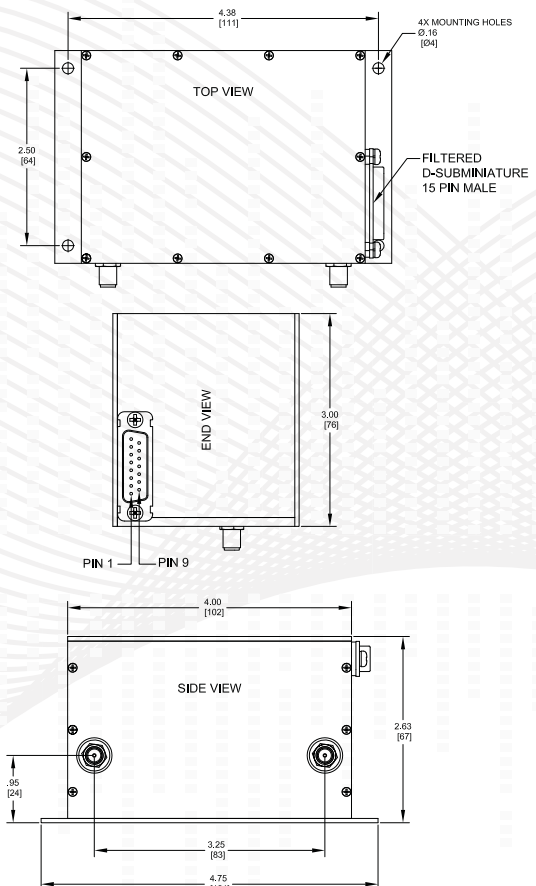
PARALLEL INTERFACE			
PIN #	Reference Designator	Description	Maximum Ratings
1	A2	Parallel Bit 2	-0.5 to (V <sub>CC</sub> + 0.5) V
2	A3	Parallel Bit 3	
3	A4	Parallel Bit 4	
4	A5	Parallel Bit 5	
5	A6	Parallel Bit 6	
6	A7	Parallel Bit 7	
7, 9, 11, 12	GND	Digital/RF Ground	—
8	V <sub>CC</sub>	+5 V Power Supply Input ±10%	-0.5 to +6 V
10	N/C	No Connect (1)	—
13	STB	Strobe	-0.5 to (V <sub>CC</sub> + 0.5) V
14	A0	Parallel Bit 0	
15	A1	Parallel Bit 1	

**Note(s):** 1 Leave pins disconnected for unit to function properly.

SERIAL INTERFACE			
PIN #	Reference Designator	Description	Maximum Ratings
1	SDO	Serial Data Out	0 to +6 VDC
2-6, 10	N/C	No Connect (1)	—
7, 9, 11, 12	GND	Digital/RF Ground	—
8	V <sub>CC</sub>	+5 V Power Supply Input ±10%	-0.5 to +6 V
13	STB	Strobe	-0.5 to (V <sub>CC</sub> + 0.5) V
14	SCLK	Serial Clock	
15	SDI	Serial Data In	

**Note(s):** 1 Leave pins disconnected for unit to function properly.

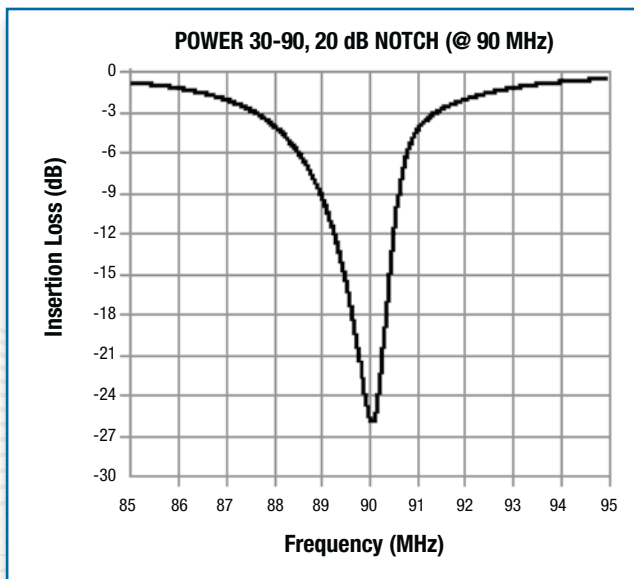
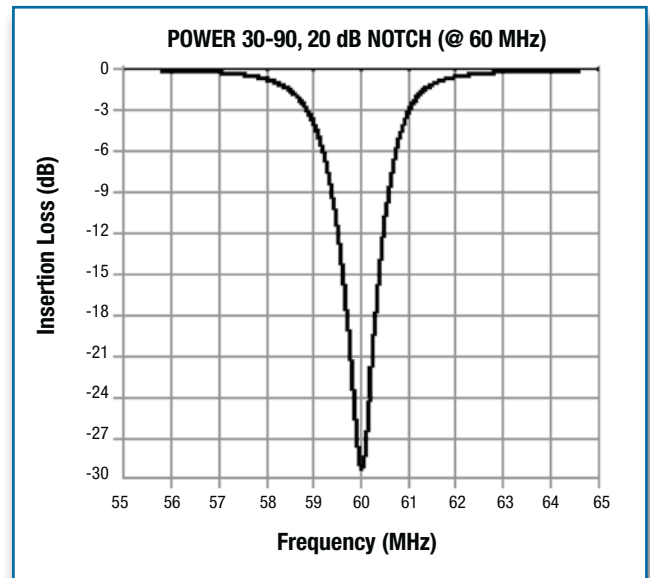
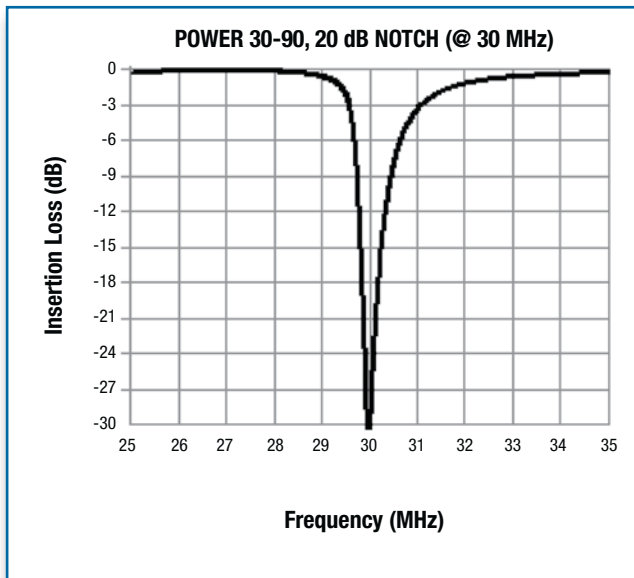
#### Mechanical Outline:



# Tunable Notch Filters

## Performance:

The following plots illustrate approximate performance (not representative of all frequency ranges)



## POWER-POLE® NOTCH

### Filters Product Number Guide:

Series	Frequency (MHz)	Notch Depth (dB)	Options
POWER-NOTCH	30-90	20	B C

**Available Options:** B. Serial Interface

C. Custom Frequency Bands (Specify START and STOP frequencies in MHz.)

**Note(s):** Options may be limited to particular frequency bands and/or configurations. Consult factory for your application.

**Example:** Product # POWER-NOTCH-30-90-20