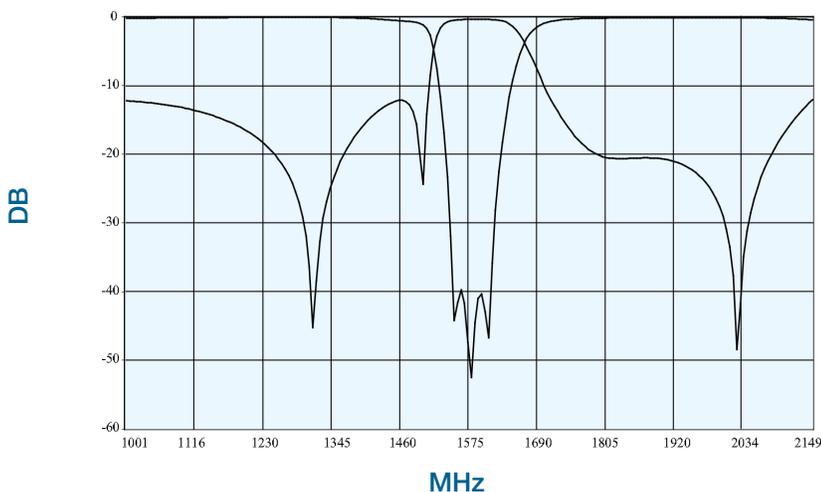




Specification	Standard	*Special
Electrical		
Notch Center Frequency (Fc)	800 to 2500 MHz	400 to 3500 MHz
Notch width (% of Fc)	1 to 5	0.5 to 10
Notch depth	10 to 60 dB	10 to 60 dB
Number of Sections available	3 to 6	2 to 8
Resonator Size (mm)	3 to 8	2 to 12
Resonator Size (inches)	0.12 to 0.32	0.08 to 0.5
Nominal Impedance	50Ω	50 to 75Ω
Maximum Insertion Loss	1.25 to 3.0 dB	0.85 to 3.0 dB
Maximum VSWR	2/1	1.5/1
Maximum Input Power (Average) (Watts to 10,000ft.)	1	2
Maximum Input Power (Peak) (Watts to 10,000ft.)	2	10
Environmental		
Shock	15 G's	75 G's
Vibration	5 G's	30 G's
Humidity	90% relative	100% relative
Altitude	Unlimited	Unlimited
Temperature Range (Operating)	- 30°C to + 85°C**	- 54°C to + 100°C
Temperature (Non-Operating)	- 40°C to + 100°C	- 62°C to + 150°C
Mechanical		
Approximate Weight (grams)	L x W x H x 50	L x W x H x 50
Mounting Provisions	See Next Page	See Next Page

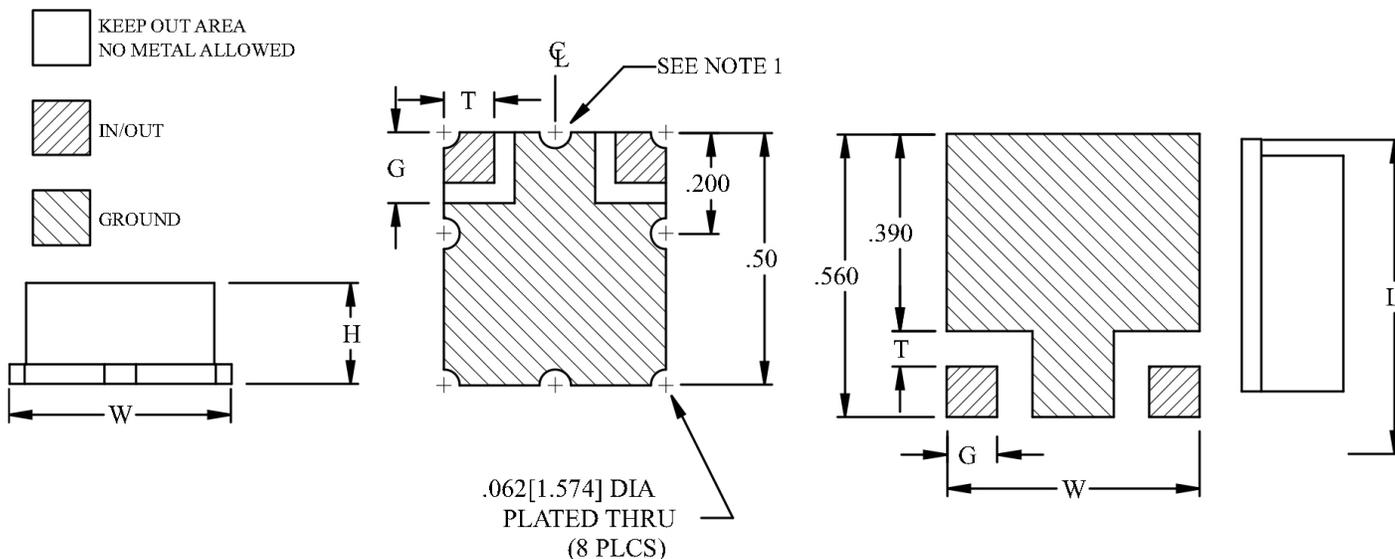
*Contact Lark Engineering

**For 1 to 1/5% BW, 0°C to + 50°C



Typical response for a
1575MHz Band Reject filter

MECHANICAL SPECIFICATIONS – SDN Series



Note 1 - Additional plated thru holes will be provided on this edge, as space allows.

Note 2 - All dimensions are in inches unless otherwise specified.

The approximate width (W) of a Lark SDN series filter can be determined by the formula:

$$W = N \times RS + 0.09$$

Where N is the number of sections and RS is the resonator size in inches (see below). The minimum possible width (W) is 0.250, the maximum height (H) of a Lark SDN series is determined by the chart below.

For widths (W) greater than 0.400, Insulating gap (G) is 0.140 and pad size (T) is 0.100.

For widths (W) less than 0.400 and/or Fc greater than 3000 Mhz, Insulating gap (G) is 0.100 and Pad size (T) is 0.070.

The approximate length of a Lark SDN filter is a function of the PCB carrier and the resonator size (see below). Standard lengths of Printed Circuit Boards are 0.250, 0.500, and 0.750. Resonators can extend beyond the length of the PCB as much as 0.150 until the next PCB size will be used. The length (L) is equal to:

$$L = FAC/Fc + C$$

Where:

FAC = See Below

Fc = Center Frequency (MHz)

RS (mm)	RS (inches)	H MAX (inches)
1	0.04	0.12
2	0.08	0.16
3	0.12	0.20
4	0.16	0.24
5	0.20	0.28
6	0.24	0.32
8	0.32	0.40

Frequency Range	FAC	C
800-1200	330	0.30
1201-2000	490	0.30
2001-5000	660	0.30

Benchmark Lark Technology

3201 E Harbour Dr | Phoenix, AZ 85034, USA

833.236.2400 | www.bench.com/lark

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