



# PIN DIODE LIMITERS

LOW LEAKAGE LS SERIES

1W CW, 0.1 - 18 GHz

## FEATURES

- Low Limiting Threshold (+6 dBm Typical)
- Low Leakage Level (+13 dBm Typical)
- 1 Watt CW and 200 Watt Peak (1  $\mu$ sec) Power Handling Capability
- Built-In DC Block @ Input and Output
- Hermetically Sealed Module
- Typical Recovery Time is Less Than 10  $\mu$ sec



## APPLICATIONS

- Front End Protection for LNA's
- Power Leveling (Limiting)
- Receiver Protection

## ENVIRONMENTAL RATINGS

Max Input Power.....1 Watt CW &  
 200 Watt Peak ( $\mu$ sec) Power Handling Capability  
 Operating Temperature Range.....-55°C to +125°C  
 Storage Temperature Range.....-65°C to +125°C  
 Shock..... 50G, 11 msec  
 Vibration..... 20G, 100 to 2000 Hz

## Specifications: (@ +25°C)

MODEL	FREQUENCY RANGE (GHz)	MAXIMUM INSERTION LOSS (dB)	MAX VSWR	TYP LIM THRESHOLD (dBm)	MAX LEAKAGE @ 1W CW INPUT (dBm)	PACKAGE STYLE
LS0105	0.1 – 0.5	0.4	1.3:1	+6	+14	B, BF, L
LS0110	0.1 – 1.0	0.5	1.4:1	+6	+14	B, BF, L
LS0120	0.1 – 2.0	0.6	1.4:1	+6	+14	B, BF, L
LS0140	0.1 – 4.0	0.8	1.5:1	+6	+14	B, BF, L
LS01012	0.1 – 12.0	1.7	1.6:1	+6	+14	B, BF, L
LS01018	0.1 – 18.0	2.2	2.0:1	+6	+14	B, BF, L
LS0510	0.5 – 1.0	0.5	1.4:1	+6	+14	B, BF, L
LS0520	0.5 – 2.0	0.6	1.4:1	+6	+14	B, BF, L
LS0540	0.5 – 4.0	0.7	1.4:1	+6	+14	B, BF, L
LS0560	0.5 – 6.0	1.2	1.5:1	+6	+14	B, BF, L
LS05012	0.5 – 12.0	1.6	1.6:1	+6	+14	B, BF, L
LS05018	0.5 – 18.0	2.0	2.0:1	+6	+14	B, BF, L
LS1020	1.0 – 2.0	0.6	1.4:1	+6	+14	B, BF, L
LS1060	1.0 – 6.0	1.2	1.5:1	+6	+14	B, BF, L
LS1012	1.0 – 12.0	1.6	1.6:1	+6	+14	B, BF, L
LS1018	1.0 – 18.0	2.0	2.0:1	+6	+14	B, BF, L
LS2040	2.0 – 4.0	0.7	1.4:1	+6	+14	B, BF, L
LS2060	2.0 – 6.0	1.2	1.5:1	+6	+14	B, BF, L
LS2080	2.0 – 8.0	1.3	1.6:1	+6	+14	B, BF, L
LS2018	2.0 – 18.0	2.0	2.0:1	+6	+14	B, BF, L
LS4080	4.0 – 8.0	1.3	1.5:1	+6	+13	B, BF, L
LS6018	6.0 – 18.0	2.0	2.0:1	+6	+13	B, BF, L
LS7012	7.0 – 12.0	1.6	1.6:1	+6	+13	B, BF, L
LS8016	8.0 – 16.0	1.8	1.8:1	+6	+13	B, BF, L
LS8018	8.0 – 18.0	2.0	2.0:1	+6	+13	B, BF, L
LS1118	11.0 – 18.0	2.0	2.0:1	+6	+13	B, BF, L

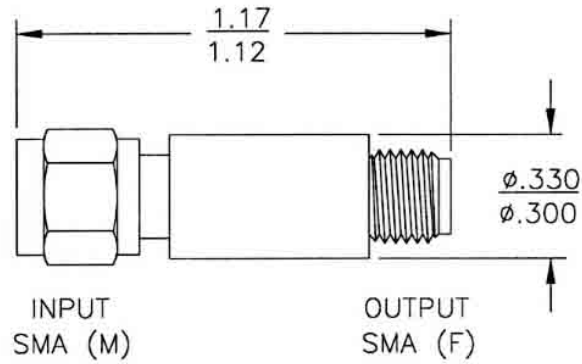
Note 1: Insertion loss and VSWR tested @ -10dBm

Note 2: Minimum power handling capability -1 Watt CW or 200 Watts peak (1  $\mu$ sec, 0.1% duty) derated to 20% @ +125°C.

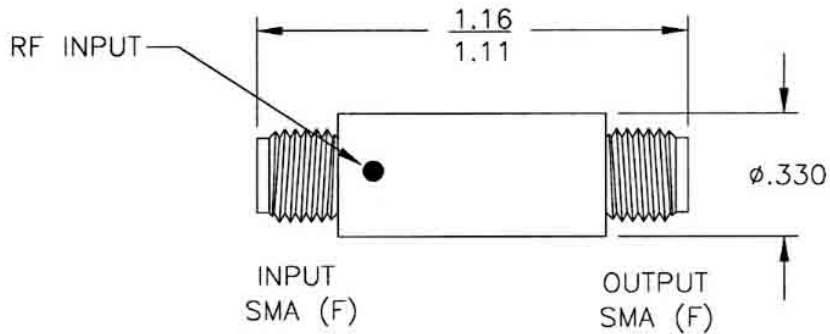
Note 3: Standard outline in "B" style add suffix "BF" or "L" to the model number for optional outlines.

Consult factory for higher power limiters (up to 25 Watt CW or 1 KWatt pulse peak power)

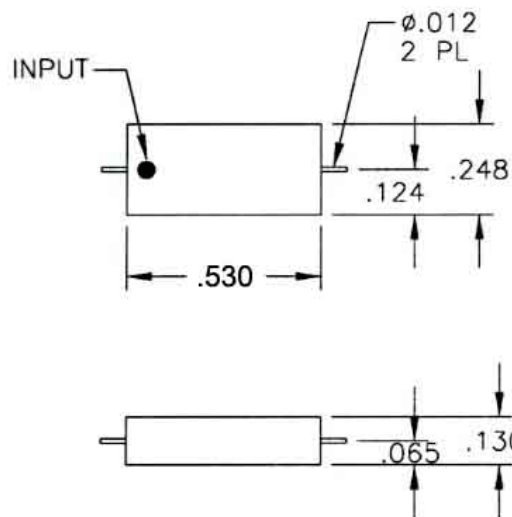
For Package Outlines see Outline Drawings Page



**OUTLINE B**



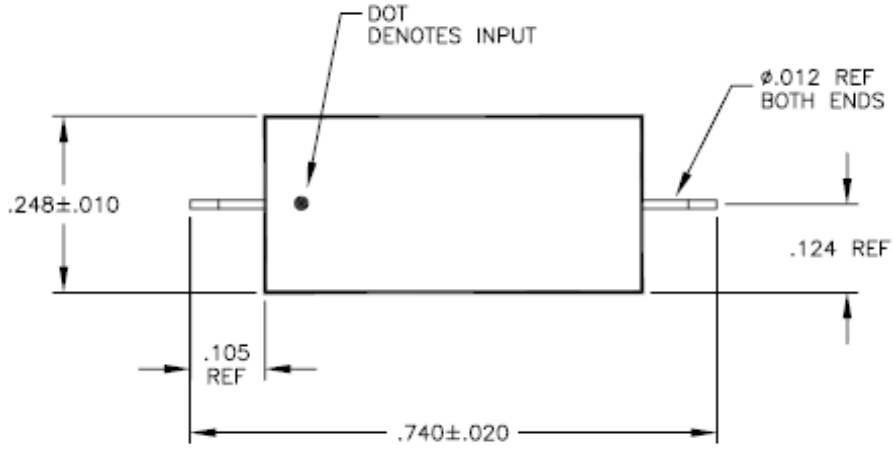
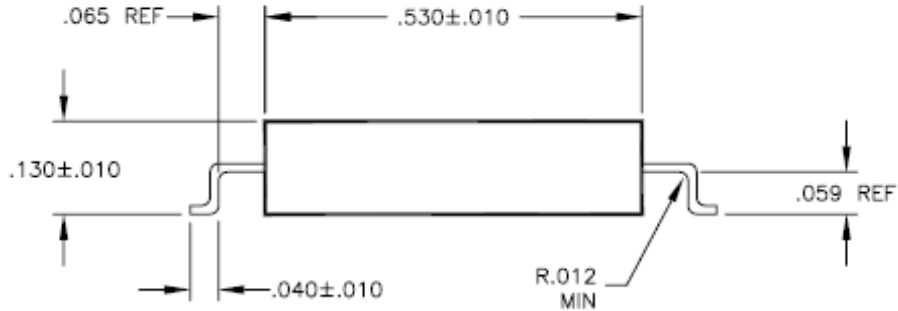
**OUTLINE BF**



**OUTLINE L**

NOTE: BLACK DOTS SHOWN INDICATE RF INPUT





**OUTLINE LB**