

PIN diode limiters



▶ PIN DIODE LIMITERS

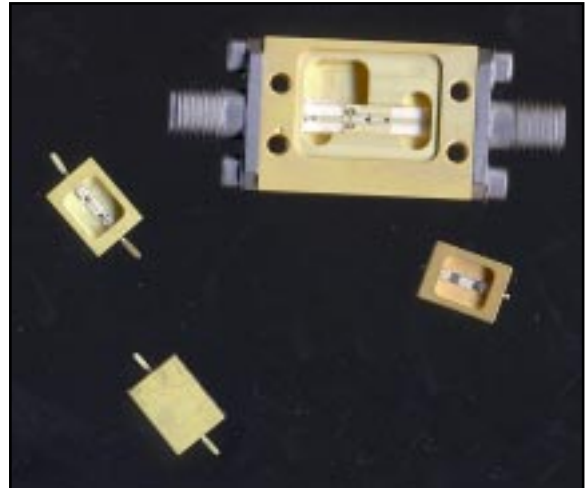
Features

Silicon Pin Diodes limiters are mainly used as a protector in receiving systems. Pin Diodes offer the unique capability to handle high breakdown voltage. Their rugged construction enables to withstand moderate and large pulse power.

TEMEX proposes low level power up to 1000 W in a wide variety of frequencies from 0.5 up to 18 GHz. Coaxial and drop-in limiters are available on standard.

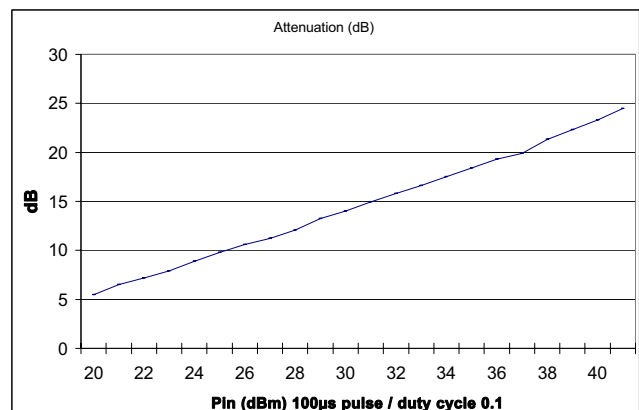
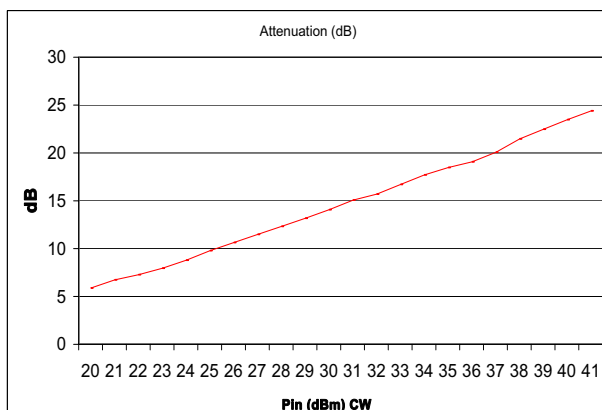
Description

The LH series offers a complete line of wide band limiters and passive solid state protectors. They are covering octave and multi-octave frequencies bandwidth. Design goal is focusing on high power limitation for airborne EW and Radar. Handling power is up to 1000W peak power and flat leakage less than 20 dBm.



*Additional characteristics and custom design are available on request!
Consult your local Sales Office.*

Typical performances @ 2 GHz



Electrical characteristics @ 25° C

All these products are in accordance with MIL-STD-883 class B specification

Model	Frequency range (GHz)	1 dB comp. point (dBm)	CW power (W)	Insertion loss (dB)	Peak power (W)	VSWR	Leakage power (mW)		Package
		Typ.	max.	max.	max.		max.	max.	
							CW (1)	Peak (2)	
LHA502-02	0.5 - 2	10	20	1.65	200	1.5	65	65	BMH230
LHB502-02	0.5 - 2	7	2	0.5	200	1.5	80	150	BMH16-01
LHC502-02	0.5 - 2	7	2	0.5	200	1.5	80	150	BMH2
LHA512-03	0.5 - 12	10	5	1.25	300	1.9	125	250	BMH230
LHB512-03	0.5 - 12	10	5	1.25	300	1.9	125	250	BMH16-01
LHC512-03	0.5 - 12	10	5	1.25	300	1.9	125	250	BMH2
LHA2004-02	2 - 4	7	2	0.8	200	1.6	80	150	BMH230
LHB2004-02	2 - 4	7	2	0.8	200	1.6	80	150	BMH16-01
LHC2004-02	2 - 4	7	2	0.8	200	1.6	80	150	BMH2
LHA2008-02	2 - 8	7	2	1.25	200	1.7	80	150	BMH230
LHB2008-02	2 - 8	7	2	1.25	200	1.7	80	150	BMH16-01
LHC2008-02	2 - 8	7	2	1.25	200	1.7	80	150	BMH2
LHA2012-02	2 - 12	7	2	1.6	200	1.9	80	150	BMH230
LHB2012-02	2 - 12	7	2	1.6	200	1.9	80	150	BMH16-01
LHC2012-02	2 - 12	7	2	1.6	200	1.9	80	150	BMH2
LHA2018-02	2 - 18	7	2	2.4	200	2	80	150	BMH230
LHB2018-02	2 - 18	7	2	2.4	200	2	80	150	BMH16-01
LHC2018-02	2 - 18	7	2	2.4	200	2	80	150	BMH2
LHA2018-10	2 - 18	10	3	2.5	1000	2.2	100	200	BMH230
LHB2018-10	2 - 18	10	3	2.5	1000	2.2	100	200	BMH16-01
LHC2018-10	2 - 18	10	3	2.5	1000	2.2	100	200	BMH2
LHA4008-10	4 - 8	10	3	1.5	1000	2	100	200	BMH230
LHB4008-10	4 - 8	10	3	1.5	1000	2	100	200	BMH16-01
LHC4008-10	4 - 8	10	3	1.5	1000	2	100	200	BMH2
LHA8012-02	8 - 12	7	2	1.7	200	1.9	80	150	BMH230
LHB8012-02	8 - 12	7	2	1.7	200	1.9	80	150	BMH16-01
LHC8012-02	8 - 12	7	2	1.7	200	1.9	80	150	BMH2
LHA8012-10	8 - 12	10	3	2	1000	2	100	200	BMH230
LHB8012-10	8 - 12	10	3	2	1000	2	100	200	BMH16-01
LHC8012-10	8 - 12	10	3	2	1000	2	100	200	BMH2
LHA8018-10	8 - 18	10	3	2.5	1000	2.2	100	200	BMH230
LHB8018-10	8 - 18	10	3	2.5	1000	2.2	100	200	BMH16-01
LHC8018-10	8 - 18	10	3	2.5	1000	2.2	100	200	BMH2
LHA12018-10	12 - 18	10	3	2.5	1000	2.2	100	200	BMH230
LHB12018-10	12 - 18	10	3	2.5	1000	2.2	100	200	BMH16-01
LHC12018-10	12 - 18	10	3	2.5	1000	2.2	100	200	BMH2

 o **Peak power:** Rating is defined at 1 μ s pulse width/duty cycle: 10^{-3} and 25° C

 o **Spike leakage:** 0.2 ERGS (typical)

 o **Leakage power:**

(1) Measured with 1 W CW input power

 (2) Measured with 100 W, 1 μ s pulse

 Maximum flat leakage is tested at 1 μ s pulse width/duty cycle:

 10^{-3} and 25° C with external DC return of less than 1 Ω .

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Maximum ratings

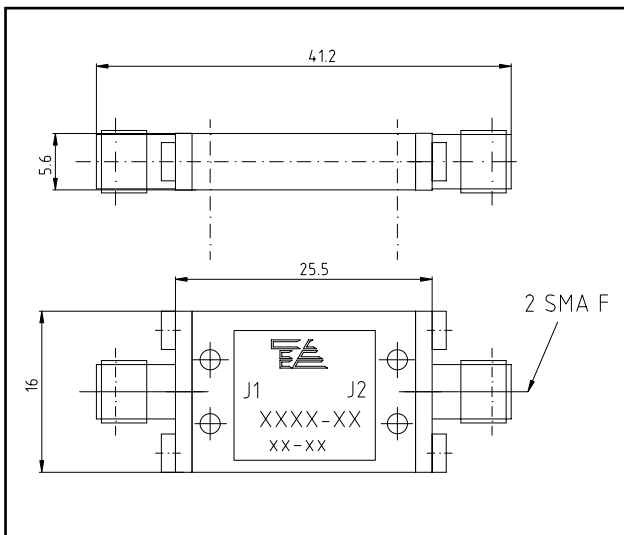
- Operating temperature: -40° C to +100° C
- Storage temperature: -55° C to +125° C

Environmental tests

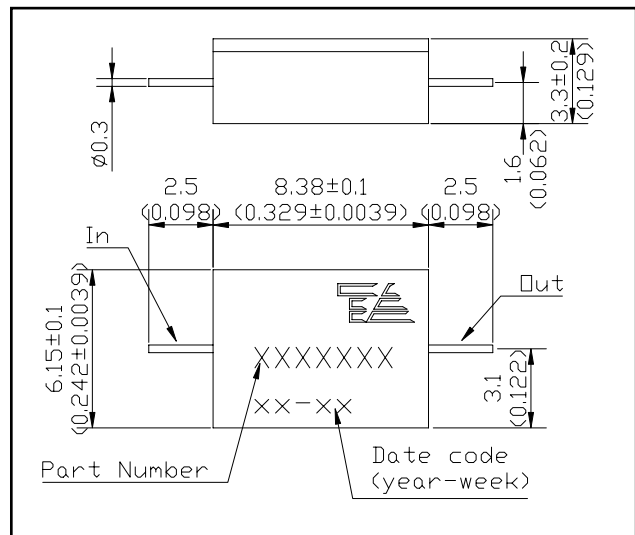
See tables page 17-3

Case drawings

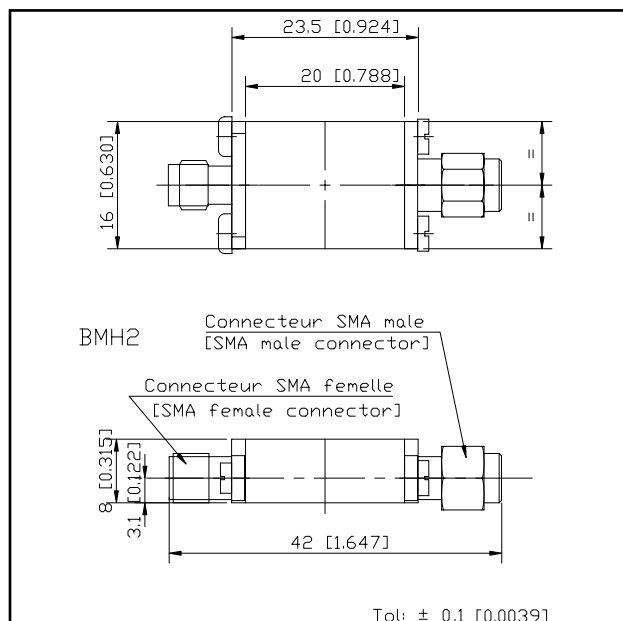
LHA SERIES
BMH230 case



LHB SERIES
BMH16-01 case



LHC SERIES
BMH2 case



Tol: ± 0,1 [0.0039]