

# Plug-In Limiter

50Ω Broadband, 0.1 to 150 MHz

PLS-1+



Generic photo used for illustration purposes only

CASE STYLE: A01

**+RoHS Compliant**

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

## Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Input Power	100mW
Control Current	10mA

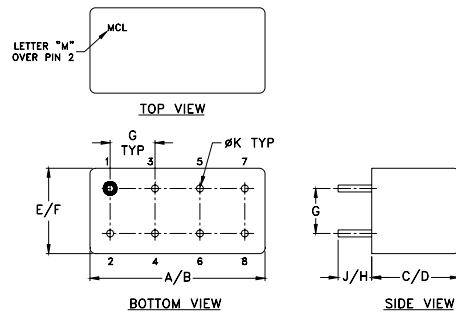
Permanent damage may occur if any of these limits are exceeded.

## Pin Connections

INPUT	1
OUTPUT	8
CONTROL	3,4^
GROUND	2,5,6,7
CASE GROUND	2

^ pins must be connected together externally

## Outline Drawing



## Outline Dimensions (inch/mm)

A	B	C	D	E	
.770	.800	.385	.400	.370	.40
19.56	20.32	9.78	10.16	9.40	10.1
G	H	J	K		v
.200	.20	.14	.031		gram
5.08	5.08	3.56	0.79		5.

## Features

- hermetic shielded case
- very small phase variation

## Applications

- military, hi-rel applications
- stabilizing generator outputs
- reducing amplitude variations
- providing constant amplitude signals in phase sensitive systems

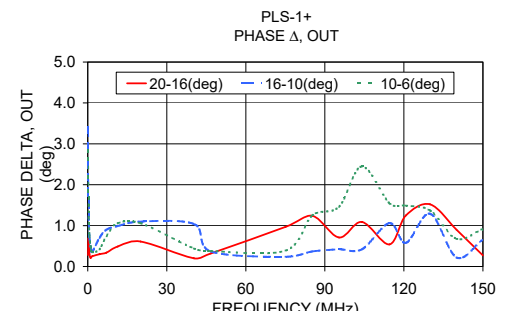
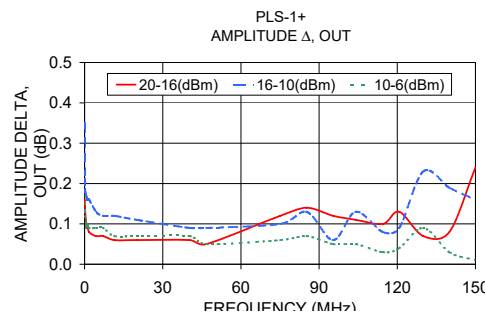
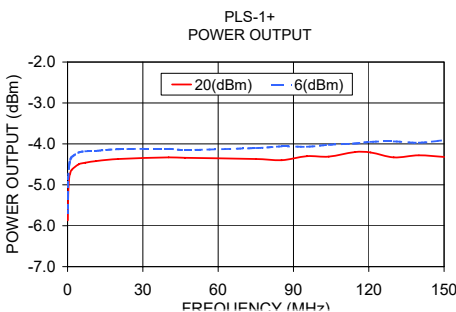
## Electrical Specifications

Parameter	Condition	Min.	Typ.	Max.	Units	
Frequency Range	—	0.1	—	150	MHz	
Input Power	—	6.0	—	20	dBm	
Output Power*	—	—	-4.0	—	dBm	
Control Current	—	—	3.0	—	mA	
Limiting Δ Output/1dB Δ Input	Amplitude	Input Power Range (dBm)		—	—	
		6 to 10	—	0.10	—	dB/dB
		10 to 16	—	0.15	—	dB/dB
	16 to 20	—	0.15	—	dB/dB	
Phase	6 to 10	—	0.8	—	°/dB	
	10 to 16	—	0.8	—	°/dB	
	16 to 20	—	0.7	—	°/dB	

\* Typical output level at typical control current, level may be changed by varying current.

## Typical Performance Data

Frequency (MHz)	Power Output		Delta (dB)	Amplitude Delta, out dBm Input			Phase Delta, Out dBm Input		
	(20 dBm IN) (dBm)	(6 dBm IN) (dBm)		20-16 (dB)	16-10 (dB)	10-6 (dB)	20-16 (deg.)	16-10 (deg.)	10-6 (deg.)
0.10	-5.87	-5.68	0.19	0.16	0.35	0.17	0.28	3.41	2.84
0.26	-5.21	-4.86	0.36	0.13	0.18	0.12	0.69	1.29	1.52
0.66	-4.83	-4.52	0.31	0.10	0.17	0.09	0.30	0.70	0.75
1.06	-4.72	-4.39	0.33	0.10	0.16	0.10	0.21	0.49	0.48
1.71	-4.63	-4.32	0.31	0.08	0.16	0.09	0.25	0.36	0.35
4.42	-4.50	-4.21	0.29	0.07	0.13	0.09	0.30	0.70	0.42
7.11	-4.46	-4.18	0.28	0.07	0.12	0.09	0.34	0.90	0.74
11.41	-4.42	-4.17	0.25	0.06	0.12	0.07	0.49	0.99	1.06
20.08	-4.37	-4.13	0.24	0.06	0.11	0.07	0.61	1.10	1.06
40.32	-4.33	-4.12	0.21	0.06	0.09	0.07	0.20	1.04	0.44
46.73	-4.34	-4.15	0.19	0.05	0.09	0.05	0.32	0.37	0.38
75.09	-4.37	-4.10	0.28	0.12	0.10	0.06	0.97	0.24	0.39
85.23	-4.40	-4.06	0.34	0.14	0.13	0.07	1.24	0.37	1.25
95.37	-4.30	-4.07	0.23	0.12	0.06	0.05	0.71	0.42	1.46
104.06	-4.31	-4.02	0.29	0.11	0.13	0.05	1.09	0.42	2.45
114.50	-4.20	-3.99	0.22	0.10	0.08	0.03	0.54	1.06	1.55
120.76	-4.21	-3.95	0.26	0.13	0.09	0.04	1.25	0.58	1.49
129.95	-4.33	-3.94	0.39	0.07	0.23	0.09	1.52	1.29	1.37
139.98	-4.28	-3.97	0.32	0.08	0.19	0.03	0.90	0.22	0.68
150.00	-4.32	-3.91	0.41	0.24	0.16	0.01	0.27	0.66	0.92



### Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
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