Plug-In

Limiter

50Ω Broadband, 0.1 to 150 MHz

PLS-1+

CASE STYLE: A01

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*

Features

- hermetic shielded case
- very small phase variation

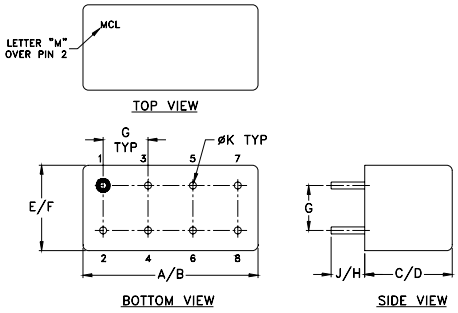
Applications

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

+RoHS Compliant

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

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		
.200	.20	.14	.031		gram
5.08	5.08	3.56	0.79		5.

Electrical Specifications

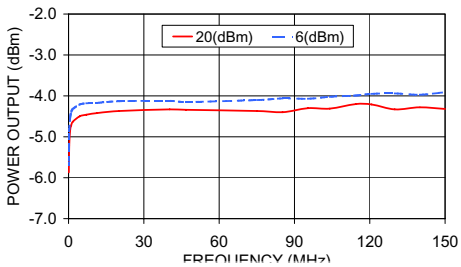
Parameter		Condition	Min.	Typ.	Max.	Units
Frequency Range		—	0.1	—	150	MHz
Input Power		—	6.0	—	20	dBm
Output Power*		—	—	-4.0	—	dBm
Control Current		—	—	3.0	—	mA
Limiting Δ Output/1dB Δ Input	Amplitude	Input Power Range (dBm) 6 to 10 10 to 16 16 to 20	 — — —	 0.10 0.15 0.15	 — — —	dB/dB
	Phase	6 to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

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

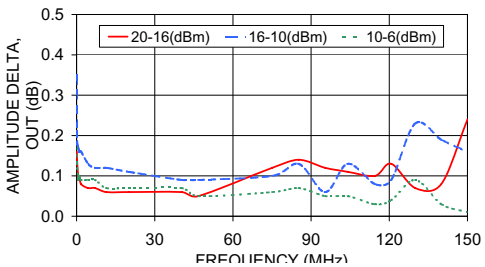
Typical Performance Data

Frequency (MHz)	Power Output (20 dBm IN) (dBm)	Power Output (6 dBm IN) (dBm)	Delta (dB)	Amplitude Delta, out dBm Input 20-16 (dB)	Amplitude Delta, out dBm Input 16-10 (dB)	Amplitude Delta, out dBm Input 10-6 (dB)	Phase Delta, Out dBm Input 20-16 (deg.)	Phase Delta, Out dBm Input 16-10 (deg.)	Phase Delta, Out dBm Input 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

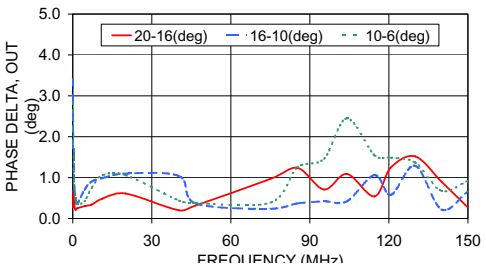
PLS-1+
POWER OUTPUT



PLS-1+
AMPLITUDE Δ, OUT



PLS-1+
PHASE Δ, OUT



Notes

A. 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.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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