



GPL-1001
Voltage Controlled Signal Limiter
5 to 1000 MHz

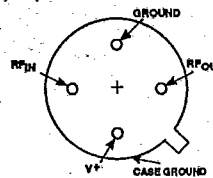
T-74-13-01

FEATURES

- 5 to 1000 MHz Frequency Coverage
- Voltage Controllable
- VSWR $\leq 2.0:1$

APPLICATIONS

- Protection for Detectors, Mixers, and Amplifiers
- Cascadable Gain Control
- EW Receiver Circuits
- Wideband System Protection



TO-12, p. 16-50

DESCRIPTION

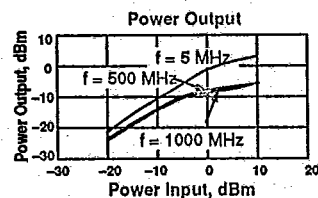
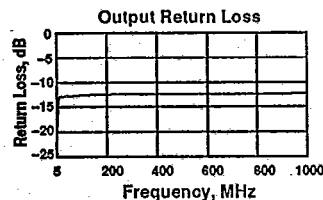
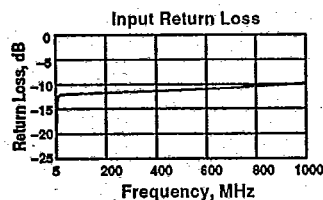
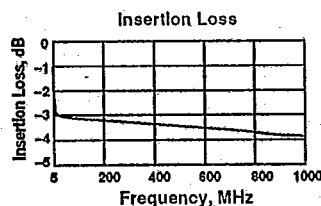
The GPL-1001 is a voltage controlled signal limiter which covers the 5 to 1000 MHz frequency range. This thin-film limiter features a voltage programmable output level with an input level as high as +26 dBm. It has low VSWR, low insertion

loss, excellent second- and third-harmonic suppression, and very low AM-to-PM conversion. Recovery from fully saturated input levels is less than 50 nanoseconds. The GPL-1001 is provided in the TO-12 package.

ELECTRICAL SPECIFICATIONS* (Measured in a 50-ohm system @ +15 VDC nominal unless otherwise noted)

Model	Frequency Response (MHz) Minimum	Limited Output Power (@ +10 dBm P _{in})	Insertion Loss Small Signal (dB)	Output Power Flatness (+dB)	VSWR Typical		Third-Harmonic (dBc)	Second-Harmonic (dBc)	Operating Bias	Current (mA) Typical	Maximum Recommend Input Power (dBm)	Maximum Recommend Bias (VDC)
		dBm Maximum	Typical	Typical	Input	Output	Typical	Typical	VDC Nominal			
GPL-1001	5-1000	-4.0 (-8 typ)	5.0	1.0	2.0	2.0	12	30	+15	5	+26	+20

*Limiter incorporates DC coupled diodes shunted to ground at input pin.

TYPICAL PERFORMANCE AT 25°C TEMPERATURE (at +15 VDC unless otherwise noted)**WEIGHT:** (typical) 1.5 grams

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