



Blue Tops RF Modules > Through-Line Power Level Detector

Features:

- Input Frequency 5 MHz to 2 GHz
- In-Line Power Detection
- Linear True RMS Response
- Optional Window Comparator

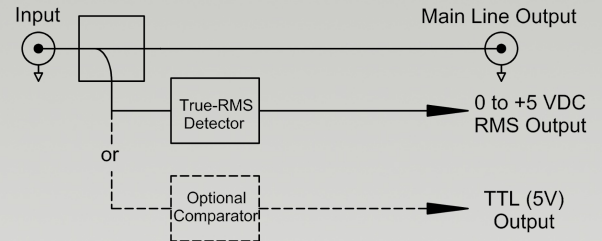
Applications:

- Synthesizer Building Block
- Communication Systems
- Radar Systems
- Electronic Warfare Systems

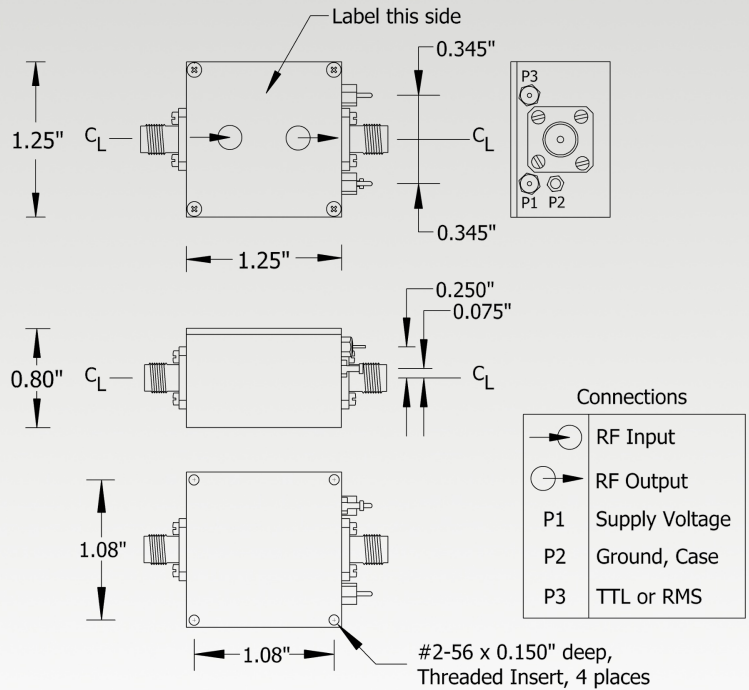


Description:

The TLPD is a broadband through-line power level detector suitable for monitoring the input or output levels of frequency sources from 5 MHz to 2 GHz. This module features a directional coupler combined with either an accurate true RMS power detector or a window comparator for implementing a TTL compatible alarm function. Please consult our technical staff for assistance in configuring a TLPD module to meet your needs.



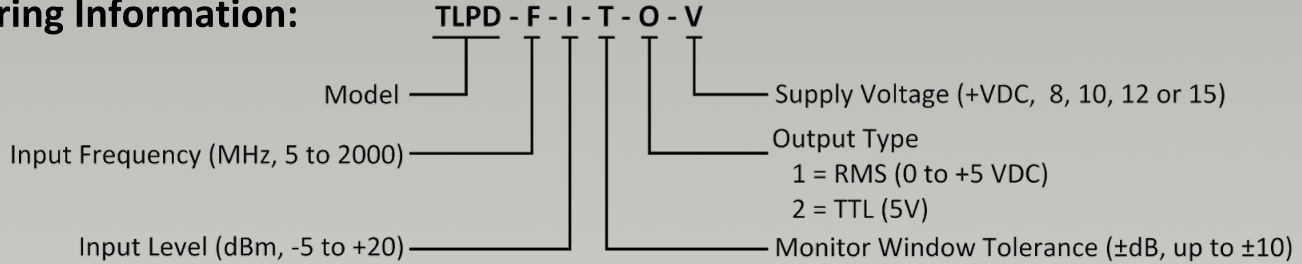
Electrical Specifications	
Input Frequency (fixed, specify)	5 MHz to 2 GHz
Input Power Level (fixed, specify)	-5 dBm to +20 dBm
Main Line Insertion Loss	1 dB, typical @ 500 MHz
Input/Output VSWR	≤ 2.0:1
Monitor Window (tolerance relative to the input power level)	up to ±10 dB
Coupled Line Output:	
Option 1 - RMS (relative to the full monitor window range)	0 to +5 VDC
Option 2 - TTL Compatible (Low = ≤ 0.8 VDC; High = +3.5 to +5.5 VDC)	Low if the power level is ≤ or ≥ the preset tolerance window.
Supply Voltage (specify)	+8, +10, +12, +15 or +20 VDC
Current	≤ 30 mA
Operating Temperature	0 to +50°C
Storage Temperature	-40 to +85°C
Mechanical	
Dimensions	1.25" x 1.25" x 0.8"
Package	Nickel-Plated Machined Aluminium
DC Supply and Monitor	Feed Thru Capacitor Solder Pins
Ground	Turret Terminal Solder Pin
RF Input / Output	SMA female *
* SMA female connectors are used unless otherwise specified. Other options include SMA male, right angle SMAs, BNC female and others. Contact factory for custom configurations.	





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Ordering Information:



NOTE: The monitor window will be set to a fixed tolerance of up to ± 10 dB relative to the specified input level.

EXAMPLE

Input Power Level: +13 dBm

Monitor Window Tolerance: ± 3 dB

Configured with an RMS output, a DC voltage from 0 to +5 VDC will be provided and will vary relative to the input levels within the fixed tolerance. (i.e. at +10 dBm, the RMS voltage will be ~ 0 VDC; at +16 dBm, the RMS voltage will be $\sim +5$ VDC).

Configured with a TTL output, the device will trigger low if the input level is ≤ 10 dBm or ≥ 16 dBm. The device will trigger high while the input level is within the tolerance window.

Standard P/N	Input Frequency	Input Level	Monitor Window Tolerance	Monitor Output Type	Supply Voltage
TLPD-10-10-3-1-15	10 MHz	+10 dBm	± 3 dB	RMS	+15 VDC
TLPD-10-10-3-2-15	10 MHz	+10 dBm	± 3 dB	TTL	+15 VDC
TLPD-100-13-5-1-12	100 MHz	+13 dBm	± 5 dB	RMS	+12 VDC
TLPD-100-13-5-2-12	100 MHz	+13 dBm	± 5 dB	TTL	+12 VDC
TLPD-500-15-8-1-8	500 MHz	+15 dBm	± 8 dB	RMS	+8 VDC
TLPD-500-15-8-2-8	500 MHz	+15 dBm	± 8 dB	TTL	+8 VDC
TLPD-1000-13-5-1-12	1000 MHz	+13 dBm	± 5 dB	RMS	+12 VDC
TLPD-1000-13-5-2-12	1000 MHz	+13 dBm	± 5 dB	TTL	+12 VDC