



# MODEL NUMBER DTD01904

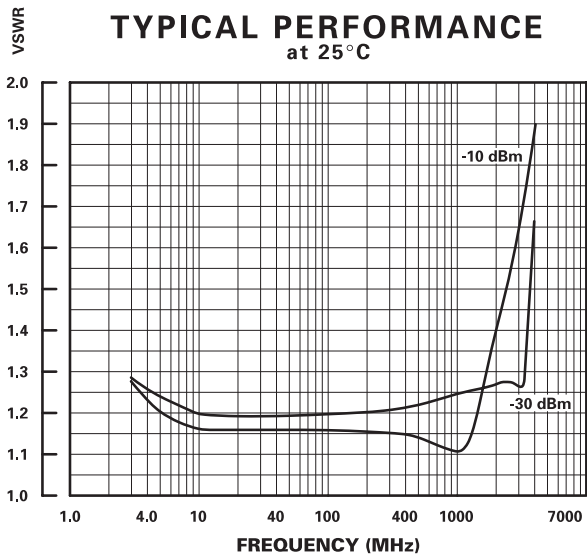
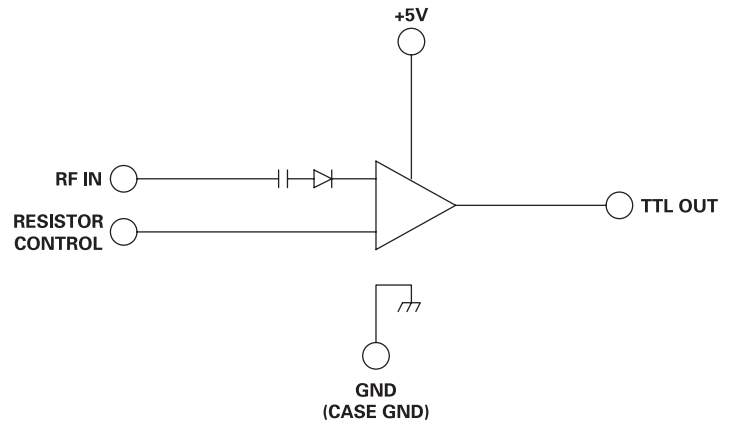
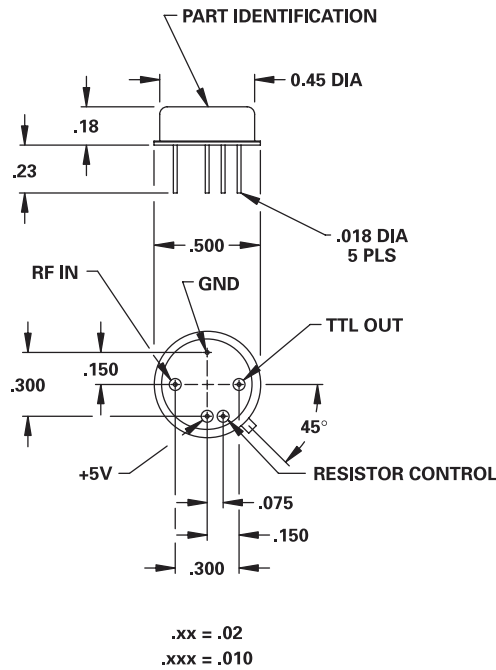
## Bit Detector

### FEATURES

- 10-2000 MHz
- -30 to -10 dBm Dynamic Range
- Adjustable Threshold Level
- 1 mA Sink/Source Current

• See DTD05226 for Surface Mount Version

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### GUARANTEED PERFORMANCE

Parameter	Min	Typ	Max	Units	Conditions
Operating Frequency	10		2000	MHz	
Dynamic Range	-30		-10	dBm	
Resistor Control		35 6500		OHMS	$P_{in} = -30$ dBm $P_{in} = -10$ dBm
Hysteresis		0.8	1.2	dB	
Temperature Stability		$\pm 1.4$	$\pm 1.5$	dB	
Input Flatness		$\pm 0.45$	$\pm 1.0$	dB	
Response Time (See Note 1)		275 8.5	350 30	$\mu$ Sec mSec	@ -10 dBm @ -30 dBm
Input VSWR		1.3/1 1.45/1	2.2/1		-30 dBm < $P_{in}$ < -20 dBm -20 dBm < $P_{in}$ < -10 dBm
Output Current		Source -1 Sink 1	-5.3 1.13	mA	$V_{OH} = +2.7$ V $V_{OL} = +0.5$ V
DC Current			4.0	5.0 mA	At +5 VDC
RF Power				+13 dBm	No Damage
Operating Temperature	-55	+25	+85	°C	TA

Note 1: Response Time for Input Change > 3 dB Above CW Threshold