



MODEL NUMBER DTD01904

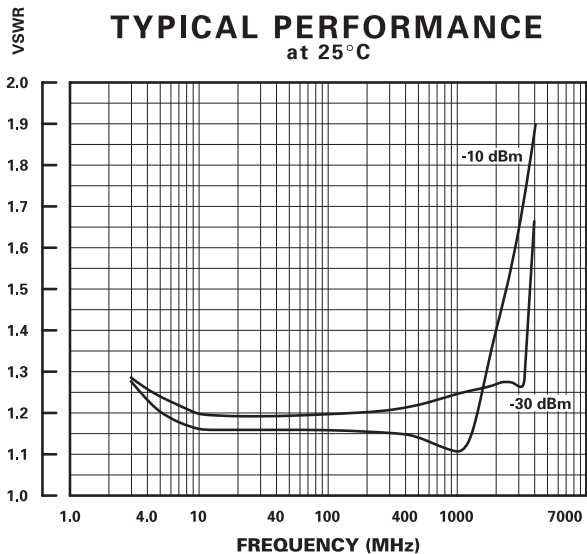
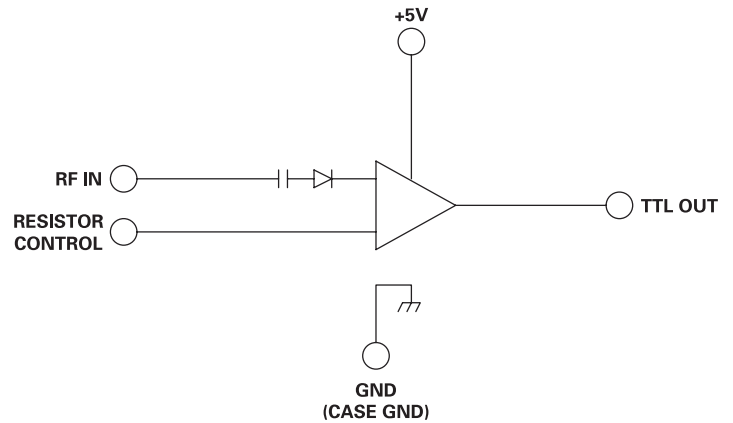
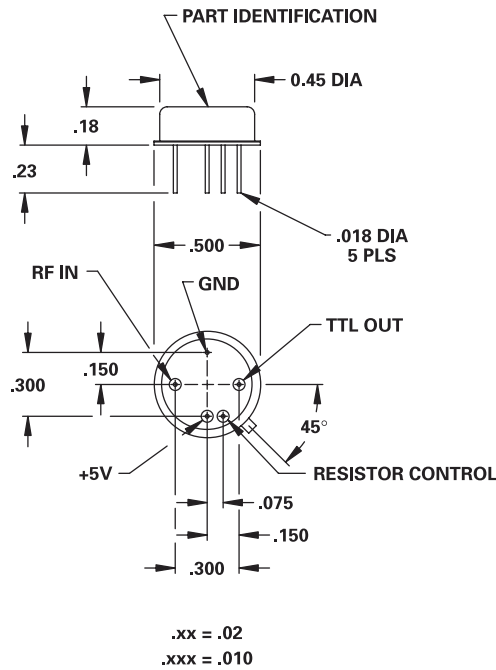
Bit Detector

FEATURES

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

• See DTD05226 for Surface Mount Version

TD



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		±1.4	±1.5	dB	
Input Flatness		±0.45	±1.0	dB	
Response Time (See Note 1)		275 8.5	350 30	µSec 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			No Damage	+13	dBm
Operating Temperature	-55	+25	+85	°C	TA

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