



Ultra Wide Band Power Detector 0.01 - 40GHz



Features

- Ultra Wide Band 0.01-40GHz
- High Sensitivity
- Low VSWR

Typical Applications

- Wireless Infrastructure
- Military and Aerospace
- Test and Measurement

Electrical Specifications, $T_A=25\text{ }^\circ\text{C}$

Parameters	Min.	Typ.	Max.	Units
Frequency Range	0.01		40	GHz
VSWR		1.8	2.0	:1
Tss	-25			dBm
Sensitivity	0.35	0.50		mv/uw
Input Power			+20	dBm
Output Polarity	Negative(-)			
Weight	0.35			ounces
Input / Output Connectors	2.4mm-Male / SMA-Female			
Material	Brass			
Finish	Nickel Plated			

Ultra Wide Band Power Detector 0.01 - 40GHz

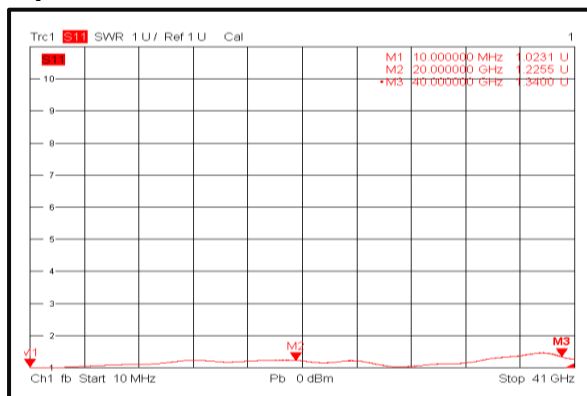


Environmental Specifications and Test Standards

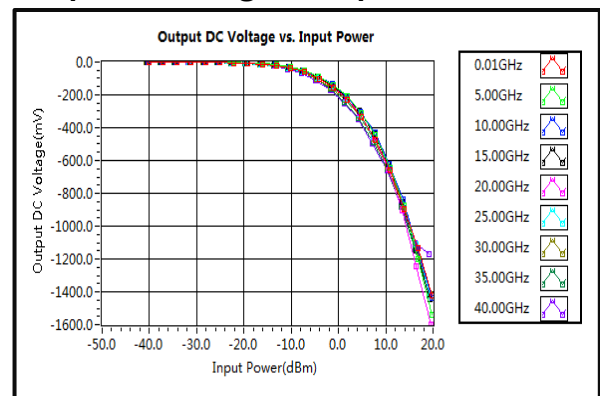
Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-45°C~+85°C
Storage Temperature		-55°C~+125°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85°C for 72 Hours
Shock		1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s 2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s 3. Total 18 times (6 directions, 3 repetitions per direction).
Altitude		Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)	MIL-STD-883	MIL-STD-883 (For Hermetically Sealed Units)

Typical Performance Plots

Input VSWR



Output DC Voltage VS. Input Power



Ultra Wide Band Power Detector 0.01 - 40GHz

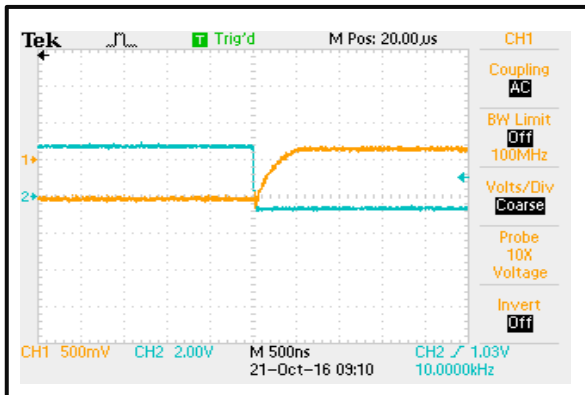


RF-LAMBDA

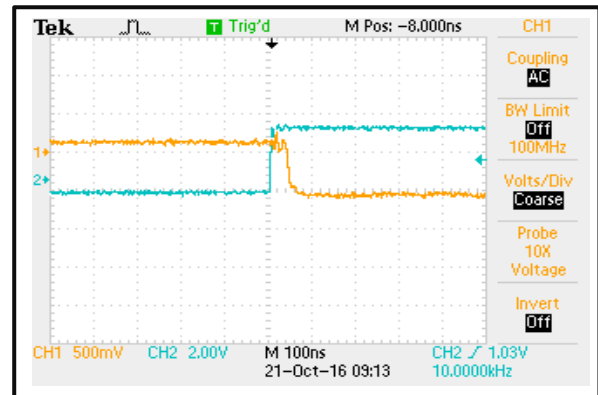
LEADER OF RF BROADBAND SOLUTIONS

RPDT0040GB

Rise time

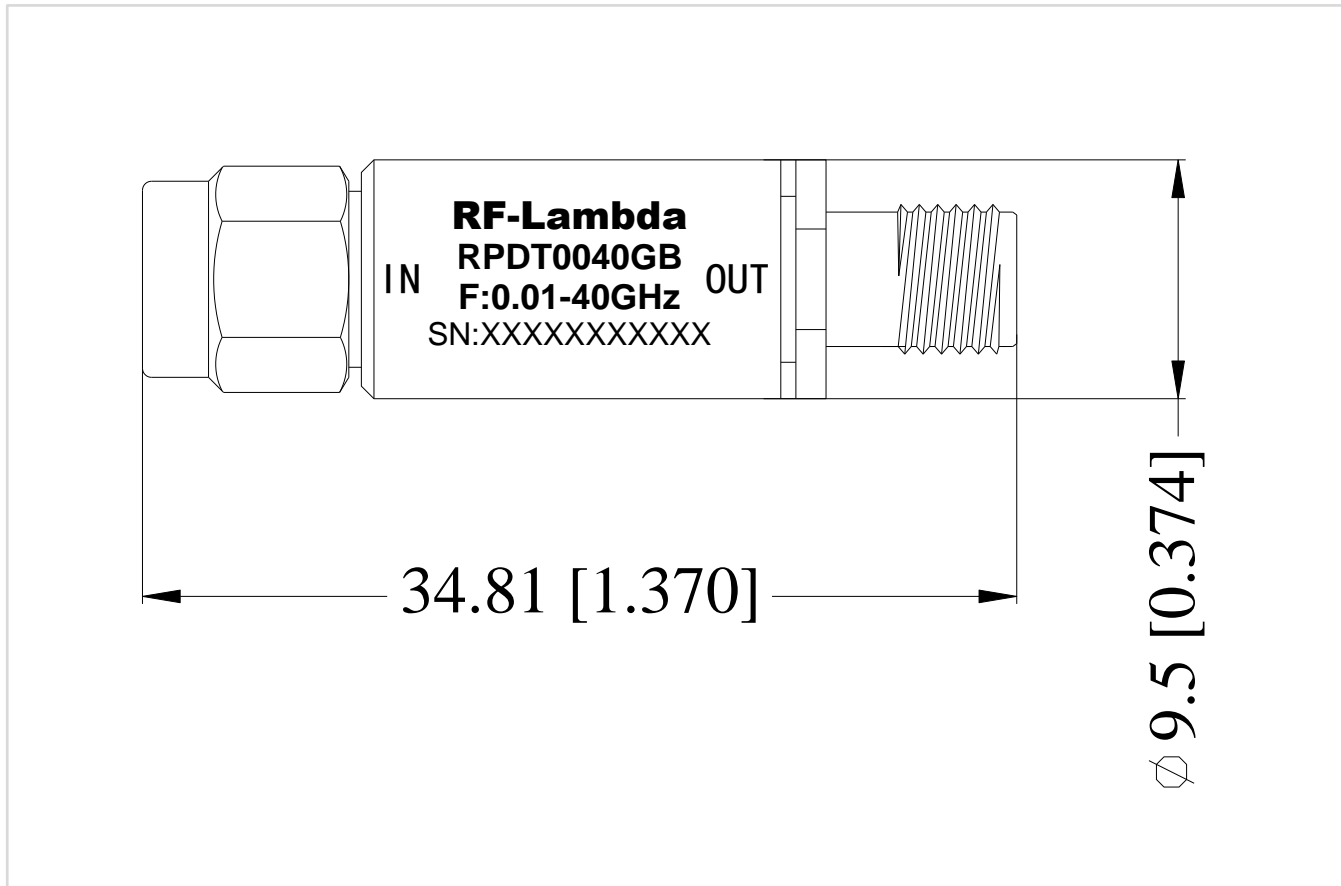


Fall time



Outline Drawing:

All Dimensions in mm [inches] Tolerance ± 0.15 [0.006]



Important Notice

The information contained herein is believed to be reliable. RF-Lambda makes no warranties regarding the information contained herein. RF-Lambda assumes no responsibility or liability whatsoever for any of the information contained herein. RF-Lambda assumes no responsibility or liability whatsoever for the use of the information contained herein. The information contained herein is provided "AS IS, WHERE IS" and with all faults, and the entire risk associated with such information is entirely with the user. All information contained herein is subject to change without notice. Customers should obtain and verify the latest relevant information before placing orders for RF-Lambda products. The information contained herein or any use of such information does not grant, explicitly or implicitly, to any party any patent rights, licenses, or any other intellectual property rights, whether with regard to such information itself or anything described by such information. RF-Lambda products are not warranted or authorized for use as critical components in medical, life-saving, or life sustaining applications, or other applications where a failure would reasonably be expected to cause severe personal injury or death.

Ultra Wide Band Power Detector 0.01 - 40GHz