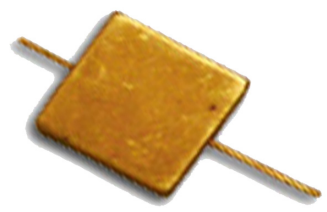


ACTM-1054

Tunnel Diode Detector Modules



Features:

- Contains hermetically sealed modules, internal RF matching, DC return, and RF bypass capacitor.
- The video port is protected from static or transient charges.
- Input impedance matching.
- Models may be chosen for broadband RF performance or for optimized narrow bands

Specifications:

Parameter	Specification	Units
Frequency Range (min)	0.5 – 4	GHz
Sensitivity (min)	800	mV/mW
Flatness vs. Frequency (max)	0.35	±dB
Typical TSS	-51	dBm
Typical VSWR	2.0:1	Ratio
Nominal Video Capacitance	39	pF

Notes:

Maximum input power: +14dBm (3dB guardband for +17dBm possible burnout)

Sensitivity is measured into an open circuit load (>10k ohm).

VSWR is measured at or below -20dBm input power level.

Video capacitance is used for RF bypass. This value can be changed if required for video response time. Contact the factory for more information.

Environmental Specifications:

Designed to meet:

MIL-E-5400, MIL-STD-202, MIL-E-16400

Operating Temp: -55°C to +125°C

Storage Temp: -65°C to +150°C

Humidity: MIL-STD-202F, M103, Cond B

Shock: MIL-STD-202F, M213, Cond B

Altitude: MIL-STD-202F, M105, Cond B

Vibration: MIL-STD-202F, M204, Cond B

Thermal Shock: MIL-STD-202F, M107, Cond A

Temperature Cycle: MIL-STD-202F, M105C, Cond D

SCREENING:

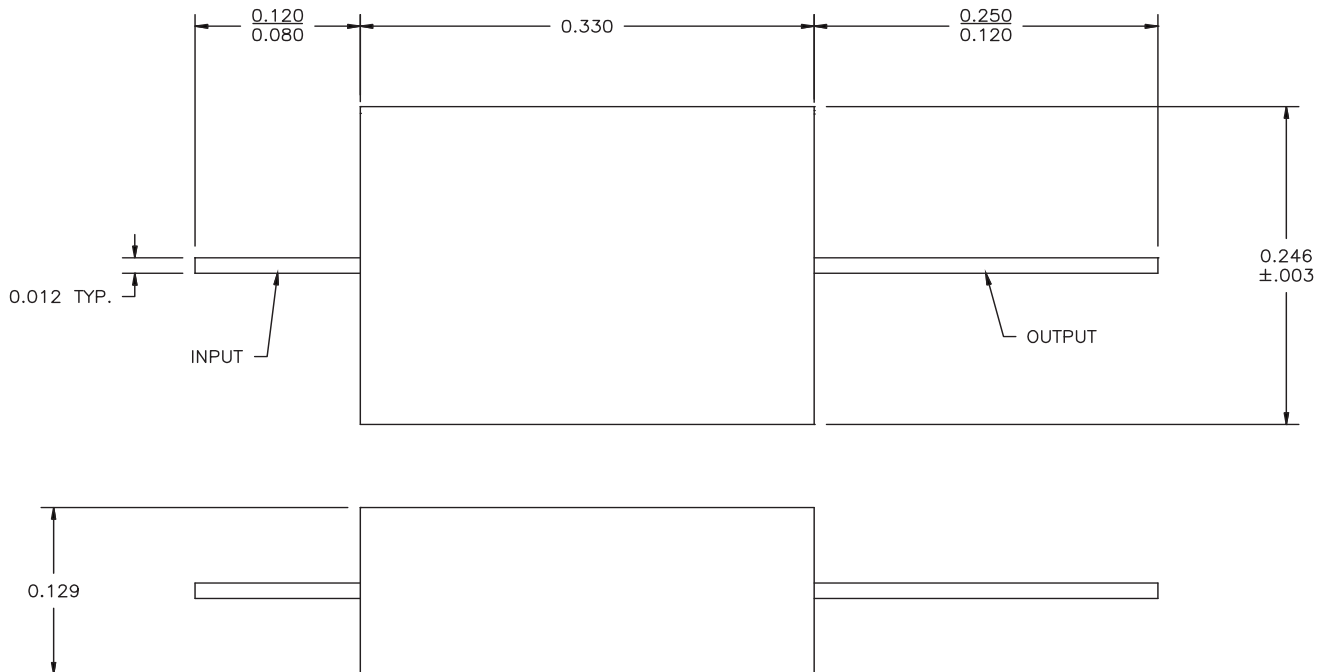
Internal Visual per MIL-STD-883, Method 2017
 Temperature Cycle: -65°C to +100°C, 10 cycles

OPTIONAL HIGH-REL SCREENING (Ref MIL-PRF-38534):

Stabilization Bake per MIL-STD-883, Method 1008
 Temperature Cycle per MIL-STD-883, Method 1010
 Constant Acceleration per MIL-STD-883, Method 2001
 Burn-in per MIL-STD-883, Method 1015
 Leak Test per MIL-STD-883, Method 1014
 External Visual per MIL-STD-883, Method 2009



40 Industrial Way East, Eatontown, NJ 07724 [USA]
 Phone: (732) 460-0212, Fax: (732) 460-0214
 www.aeroflex.com/acc, email: acc-sales@eroflex.com



STANDARD CASE STYLE M12

Part Number Ordering Information:

- Add desired polarity suffix: "N" for Negative, "P" for Positive (Ex: ACTM-1054N)
- Add desired case style suffix: "M22" (Ex: ACTM-1054NM12)
- Add "-RC" suffix: RoHS-compliant (Ex: ACTM-1054NM12-RC)

Aeroflex Control Components
Aeroflex Microelectronic Solutions
40 Industrial Way East
Eatontown, NJ 07724 [USA]
Fax: (732) 460-0214

Sales
Phone: (732) 460-0212
ACC-sales@aeroflex.com

www.aeroflex.com/Microwave www.aeroflex.com/ACC

Aeroflex Control Components reserves the right to make changes to any products and services herein at any time without notice. Consult Aeroflex or an authorized sales representative to verify that the information in this data sheet is current before using this product. Aeroflex does not assume any responsibility or liability arising out of the application or use of any product or service described herein, except as expressly agreed to in writing by Aeroflex; nor does the purchase, lease, or use of a product or service from Aeroflex convey a license under any patent rights, copyrights, trademark rights, or any other of the intellectual rights of Aeroflex or of third parties.

Copyright 2011 Aeroflex Control Components. All rights reserved.

ISO 9001:2008 certified



Our passion for performance is defined by three attributes represented by these three icons: solution-minded, performance-driven and customer-focused.