MA4E931Z2-1261A



Schottky Zero Bias Detector Diode

Rev. V2

Features

- Can be used without external DC bias
- Exhibits uniform Rv characteristics
- High Voltage Sensitivity
- P Type Schottky Diode
- Available in chip form (ODS-1261)
- RoHS Compliant* and 260°C Reflow Compatible

Description and Applications

The MA4E931Z2-1261A Zero Bias Detector (ZBD) diode is suitable for use in microstrip or stripline detector circuits. These chips can be used in automatic assembly processes due to their 0.004" gold bond pads and sturdy construction. Designed for high volume, low cost, detector applications.

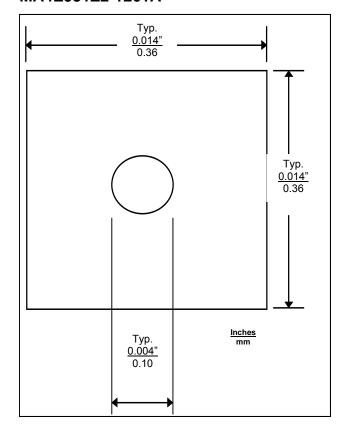
Maximum Ratings

Parameter	Symbol	Unit	Values
Operating Temperature	T _{OP}	°C	-65 to +150
Storage Temperature	T _{STG}	°C	-65 to +150
Incident RF Power (CW)	P _T	mW	75
Reverse Voltage @ 25 °C	V _R	V	3

Electrical Specifications @ +25 °C

Parameter	Condition	Symbo	Specificatio
Breakdown Voltage	I _R = 1.0 mA	V_{B}	3.0 V min.
Forward Voltage	I _F = 1.0 mA	V _F	150 mV typ.

Chip Outline MA4E931Z2-1261A



RF Performance @ 10.0 GHz @ +25 °C

Parameter	Conditions	Typical
Tangential Signal Sensitivity	BW = 2 MHz Video NF = 3.5 dB	-52 dBm min
Video Impedance (Rv)	BW = 2 MHz	$2.5 \text{K}\Omega$ min $4.5 \text{K}\Omega$ max
Voltage Output (Eo)	BW = 2 MHz	5.0 mV min

ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed. PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

Visit www.macomtech.com for additional data sheets and product information.

 ^{*} Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400

[•] India Tel: +91.80.43537383

[•] China Tel: +86.21.2407.1588