

SCHOTTKY BARRIER DIODES General Purpose

RoHS Compliant





## **DESCRIPTION**

This unique mesa construction (GC9700, GC9701, and GC9702) provides high breakdown voltage with true Schottky characteristics without resorting to the use of a diffused guard ring. The GC9703 and GC9704 are planar schottky devices. The standard devices are available in glass axial leaded packages as well as in chip form. Custom package styles are available on request.

# **APPLICATIONS**

Operating Temperature

General high speed switching. High level mixers and detectors. Bridge quads for sampling circuits. Well suited for pulse shaping as well as limiting requirements..

# **KEY FEATURES**

- Fast Switching
- Low Turn On Voltage
- Economical
- Tape and Reel Available
- RoHS Compliant<sup>1</sup>

<sup>1</sup> The GC9700 Series of products are supplied with a RoHS complaint Gold finish.

#### ABSOLUTE MAXIMUM RATINGS AT 25° C (UNLESS OTHERWISE SPECIFIED) Rating **Symbol** Value Unit Carrier Lifetime $T_L$ 100 pS °C Storage Temperature $\mathsf{T}_{\mathsf{STG}}$ -65 to +200

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## **APPLICATIONS/BENEFITS**

- Mixers
- Detectors
- Limiters
- Pulse Shaping

CHIP ELECTRICAL PARAMETERS @ 25°C (unless otherwise specified)								
Model Number	V <sub>b</sub> (V) I <sub>R</sub> =10μΑ (Min)	C <sub>T</sub> (pF) ∨ <sub>R</sub> =0∨ (Max)	V <sub>F</sub> (mV) I <sub>F</sub> =1mA (Max)	I <sub>F</sub> (mA) <sup>1</sup> @ 1.0V (Min)	I <sub>R</sub> (nA)	V <sub>R</sub> (V)		
GC9700	70	2.1	430	15	200	50		
GC9701	30	1.5	430	50	100	25		
GC9702	20	1.5	430	35	300	15		
GC9703	8	1.2	350	10 <sup>1</sup>	100	1		
GC9704	5	0.8	600	10	100	1		

-55 to +150

#### Notes:

 $I_F$  (min) for the GC9703 is measured at  $V_F$  = 0.5 V. All others measured at 1.0 V.

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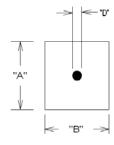


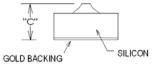


# **Typical Package Options**

# PACKAGE STYLE 00



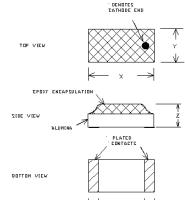




#### Notes:

- Dimensions vary by model number
  - Consult factory for details
  - Order as GC25xx 00

# PACKAGE STYLE 150A (-150E)

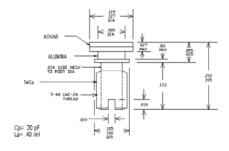


PKG	DINENSIONS (MILS)					
STYLE	V	ì	ſ	Z NOM.		
150A	11!3	60	40	30		
150B	15! 4	75	50	35		
150C	15! 4	100	50	35		
150D	20! 5	120	60	35		
150E	20!5	500	100	35		
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## PACKAGE STYLE 30

# 0.119"0.124" > 0.062"+-.002

### **PACKAGE STYLE 42**



# OTHER PACKAGE STYLES AVAILABLE ON REQUEST CONSULT FACTORY

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

# Microchip:

GC9700-150A GC9703-00 GC9701-00