

POWER GENERATION
Microwave Noise Diodes

RoHS Compliant





DESCRIPTION

The GC6000 series of RF/Microwave noise diodes represent the state of the art in noise device technology. By carefully controlling junction doping profiles and mesa geometry, these devices provide the broadest, most uniform noise response available. Outputs are true symmetrical Gaussian white noise with predictable thermal performance. Choose from dozens of case style, including glass, ceramic as well as EPSM® (enhanced performance surface mount) for commercial pick and place assembly and die form for hybrid systems.

KEY FEATURES

- Multi-Octave Bandwidth
- Wide Bias Window
- Uniform Power Output
- High Reliability
- RoHS Compliant¹

APPLICATIONS

The GC6000 Series of devices are designed to generate white noise for test equipment and specialty ECM applications. These devices can be used in narrow and broadband noise sources for Noise Figure testing as well as RF Fuses.

APPLICATIONS/BENEFITS

- RF Fuses
- Noise Sources
- Noises Figure Calibration
- Spectrum Analyzers
- Signal Path Fade Test Sets

•	ELECTRICAL PARAMETERS @ 25°C (unless otherwise specified)						
	Model Number	V _B (V) @I _R =1mA	C _J (pF) ¹ @-6V (Typ.)	$T_L(ns)$ (Typ.)	Frequency Range	ENR (db) (Min)	
	GC6001	6-10	0.5	4	0.1-18	25	
	GC6002	8-14	1.0	7	0.1-12	28	
	GC6003	12-18	1.5	10	0.1-8	31	

^{1.} Junction Capacitance is measured at 1 MHz.

ABSOLUTE MAXIMUM RATINGS AT 25° C (UNLESS OTHERWISE SPECIFIED)						
RATING	SYMBOL	VALUE	UNIT			
Maximum Leakage Current @80% of Minimum Rated V _B	I _R	0.5	uA			
Storage Temperature	T _{STG}	-65 to +150	°C			
Operating Temperature	T_OP	-55 to +150	۰C			

IMPORTANT:

For the most current data, consult our website: <u>www.MICROSEMI.com</u> Specifications are subject to change, consult factory for further information.



Copyright © 2007

Rev: 2009-01-19

These devices are ESD sensitive and must be handled using ESD precautions.

¹The GC6000 Series of products are supplied with a RoHS complaint Gold finish. Some packages can be supplied with a MIL grade Sn/Pb finish. Consult Factory for details.



POWER GENERATION
Microwave Noise Diodes

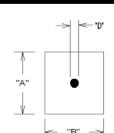
RoHS Compliant

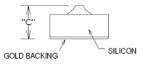




Typical Package Options

PACKAGE STYLE 00

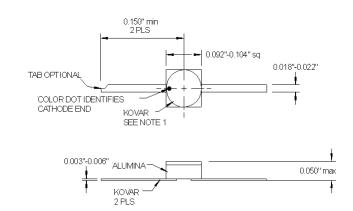




Notes:

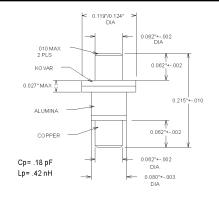
- Dimensions vary by model number
- Consult factory for details
- Order as GC600X 00

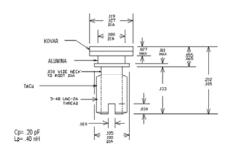
PACKAGE STYLE 17



PACKAGE STYLE 30

PACKAGE STYLE 42





OTHER PACKAGE STYLES AVAILABLE ON REQUEST CONSULT FACTORY

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Zener Diodes category:

Click to view products by Microchip manufacturer:

Other Similar products are found below:

RKZ13B2KG#P1 DL5234B 1N4682 1N4691 1N4693 1N4732A 1N4733A-TR 1N4736A 1N4759ARL 1N5241B 1N5365B 1N5369B

1N959B 1N964B 1N966B 1N972B NTE149A NTE5116A NTE5121A NTE5147A NTE5152A NTE5155A NTE5164A JANS1N4974US

1N4692 1N4700 1N4702 1N4704 1N4711 1N4714 1N4737A 1N4745ARL 1N4752A 1N4752ARL 1N4760ARL 1N5221B 1N5236B

1N5241BTR 1N5242BTR 1N5350B 1N5352B 1N961BRR1 1N964BRL RKZ5.1BKU#P6 3SMAJ5950B-TP 3SMBJ5925B-TP TDZTR24

441774C MMSZ5230BQ-13-F MMSZ5232BQ-13-F