GMP4201-GMP4232

GigaMite™

Surface Mount PIN Diodes

RoHS Compliant e3 RoHS

DESCRIPTION

This series of surface mount diodes are specifically design for high volume surface mount applications. The GigaMite design is optimized for improved electrical and thermal performance over standard plastic package technology. The result is higher frequency coverage and better power handling than comparable plastic packages.

The package parasitics provide smooth non-resonant functionality through 5 GHz. Microsemi utilizes high quality dielectric materials resulting in low loss and broadband performance.

This series of devices meets RoHS requirements per EU Directive 2002/95/EC.

KEY FEATURES

- Low Parasitics
  L_P = 0.5 nH Typical
  C_P = 0.09 pF Typical
- Surface Mount design
- Broadband Performance Through 5 Ghz
- Available on Tape & Reel for Automated Pick & Place Assembly
- Small, SOD 323 Footprint
- RoHS Compliant [1]

APPLICATIONS

Microsemi Lowell's offers a variety of PIN diodes in the GigaMite package style. These products are well suited for microwave switching and attenuator applications. They are ideal for WLAN and WIMAX applications.

APPLICATIONS/BENEFITS

- Antenna Switching for WIMAX and WLAN
- Economical RF and Microwave Switching
- Attenuators
- Broadband Performance

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}	-55 to +125	°C
Operating Temperature	T_{OP}	-55 to +125	°C

IMPORTANT:
Specifications are subject to change.
For the most current data, consult our website: ***www.MICROSEMI.com***

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

[1] These devices are supplied with a matte tin finish suitable for RoHS compliant assembly.

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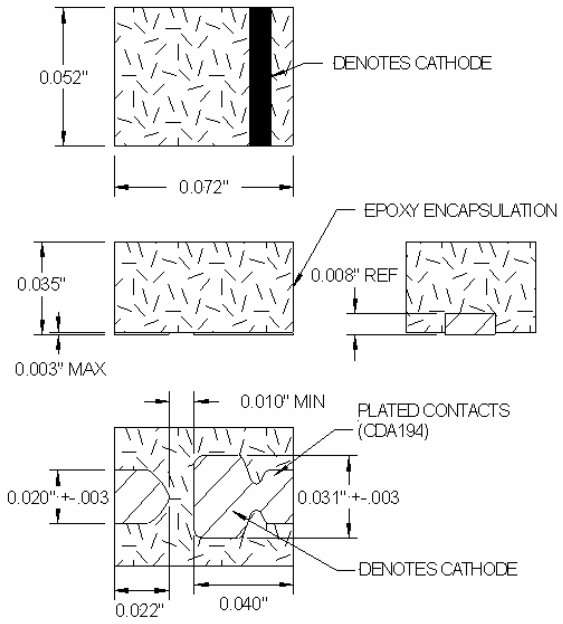
Surface Mount PIN Diodes

DEVICE ELECTRICAL PARAMETERS @ 25°C (unless otherwise specified)

Model Number	V_B (V) I_R=10µA (Min)	C_T(pF)[1] @V_R (Max)	V_R (V)	R_S(Ω)[2] @1 mA (Typ)	R_S(Ω)[2] @20 mA (Max)	T_L(nS) (Typ)	Θ (˚C/W) (Typ) THERMAL IMPEDANCE
GMP4201-GM1	75	0.18	10	2.3	1.3	100	60
GMP4202-GM1	75	0.25	10	1.8	1.0	150	50
GMP4211-GM1	100	0.18	10	5.5	2.0	250	50
GMP4212-GM1	100	0.25	10	4.2	1.5	300	40
GMP4215-GM1	100	0.60	10	1.0	0.5	400	30
GMP4232-GM1	300	0.28	50	2.5	1.0	1000	25

Notes
1- Capacitance is measured at f = 1 MHz.
2- Series Resistance R_S is measured at f=100MHz

PACKAGE STYLE GM1



NOTES

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