

Silicon Diode

GI1101

50V / 2,5A

DATASHEET

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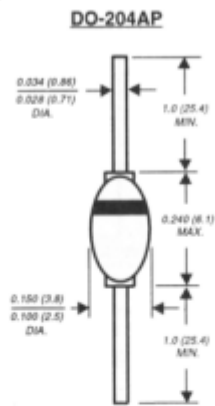
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GI1101 THRU GI1104

GLASS PASSIVATED FAST EFFICIENT RECTIFIER

Reverse Voltage - 50 to 200 Volts Forward Current - 2.5 Amperes

PATENTED*



Dimensions in inches and (millimeters)

* Brazed lead assembly is covered by Patent No. 3,930,306

FEATURES

- ◆ High temperature metallurgically bonded construction
- ◆ Glass passivated cavity-free junction
- ◆ Superfast recovery time for high efficiency
- ◆ Low forward voltage, high current capability
- ◆ Capable of meeting environmental standards of MIL-S-19500
- ◆ Hermetically sealed package
- ◆ Low Leakage
- ◆ High surge capability
- ◆ High temperature soldering guaranteed:
350°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC DO-204AP solid glass body
Terminals: Plated axial leads, solderable per MIL-STD 750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.02 ounce, 0.56 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	GI1101	GI1102	GI1103	GI1104	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	150	200	Volts
Maximum RMS voltage	V _{RMS}	35	70	105	140	Volts
Maximum DC blocking voltage	V _{DC}	50	100	150	200	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length (SEE FIG. 1)	I _(AV)	2.5			2.0	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at rated T _L	I _{FSM}	50.0				Amps
Maximum instantaneous forward voltage at 2.0A	V _F	0.975			1.25 (NOTE 5)	Volts
Maximum DC reverse current at rated DC blocking voltage	I _R	T _A =25°C 2.0 T _A =100°C 50.0		10.0 200.0		μA
Maximum reverse recovery time (NOTE 1)	t _{rr}	25.0			50.0	ns
Typical junction capacitance (NOTE 2)	C _J	45.0				pF
Typical thermal resistance (NOTE 1) (NOTE 4)	R _{θJA} R _{θJL}	65.0 20.0				°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-65 to +175			-65 to +150	°C

NOTES:

- (1) Reverse recovery test conditions: I_F=0.5A, I_R=1.0A, I_T=0.25A
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
- (3) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length and mounted on P.C.B. with 0.5 x 0.5" (12 x 12mm) copper pads
- (4) Thermal resistance from junction to lead at 0.375" (9.5mm) lead length with both leads attached to heat sinks
- (5) Tested at I_F=1.0A

RATINGS AND CHARACTERISTIC CURVES GI1101 THRU GI1104

