

Silicon Diode

M100B

100V / 1A

DATASHEET

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OEM – General Semiconductor

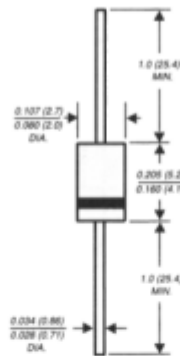
Source: General Semiconductor Databook 1998

M100A THRU M100M

GENERAL PURPOSE PLASTIC RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere

DO-204AL



Dimensions in inches and (millimeters)

FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ◆ High surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC DO-204AL, molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.012 ounce, 0.3 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	M100 A	M100 B	M100 D	M100 G	M100 J	M100 K	M100 M	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at T _A =100°C	I _(AV)	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at T _A =75°C	I _{FSM}	50.0							Amps
Maximum instantaneous forward voltage at 1.0A	V _F	1.0					1.1		Volts
Maximum full load reverse current full cycle average 0.375" (9.5mm) lead length at T _A =55°C	I _{R(AV)}	100.0							µA
Maximum DC reverse current at rated DC blocking voltage	I _R	1.0					50.0		µA
		T _A =25°C							
		T _A =100°C							
Typical reverse recovery time (NOTE 1)	t _{rr}	2.0							µs
Typical junction capacitance (NOTE 2)	C _J	15.0							pF
Typical thermal resistance (NOTE 3)	R _{θJA} R _{θJL}	50.0					25.0		°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-50 to +150							°C

NOTES:

- (1) Measured with I_F=0.5A, I_R=0.1A, 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 and from junction to lead at 0.375" (9.5mm) lead length, P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES M100A THRU M100M

