

VOLTAGE RANGE: 50 - 1000V

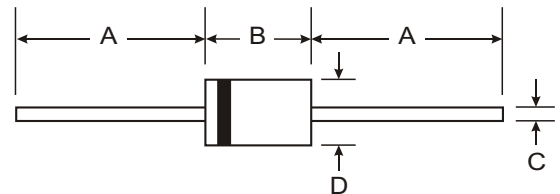
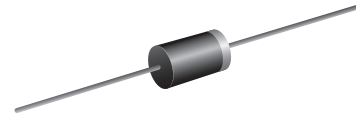
CURRENT: 1.0 A

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: DO-41, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Approx. Weight: 0.35 grams
- Mounting Position: Any
- Marking: Type Number



DO-41		
Dim	Min	Max
A	25.40	—
B	4.06	5.21
C	0.71	0.864
D	2.00	2.72
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	M100A	M100B	M100D	M100G	M100J	M100K	M100M	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at T _A =100°C	I _(AV)	1.0							A
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							A
Maximum instantaneous forward voltage at 1.0A	V _F	1.0					1.1		V
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 T _A =25°C T _A =100°C	I _R	1.0					50.0		μA
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_{rr}=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

FIG. 1 - FORWARD CURRENT DERATING CURVE

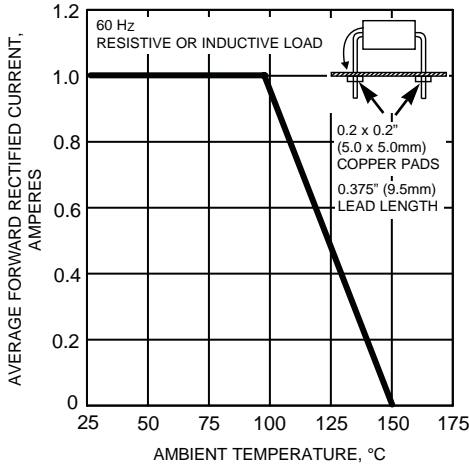


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

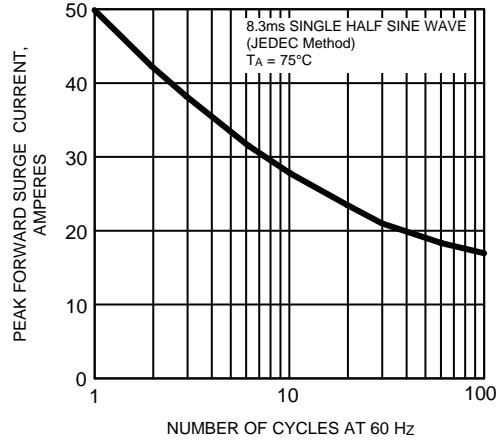


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

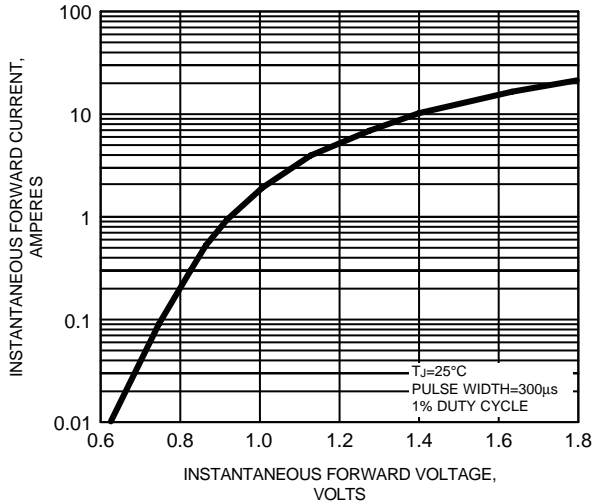


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

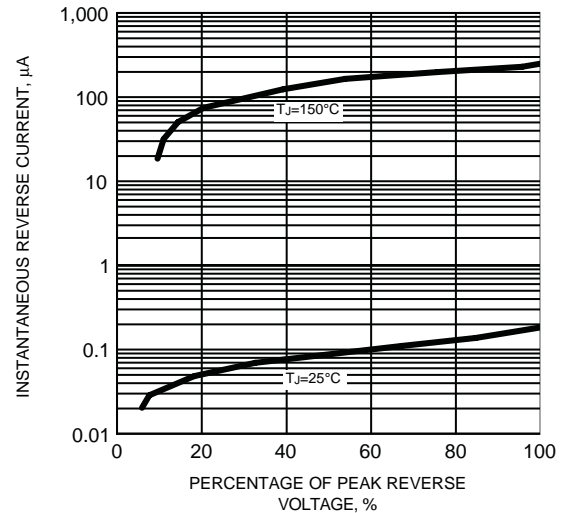


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

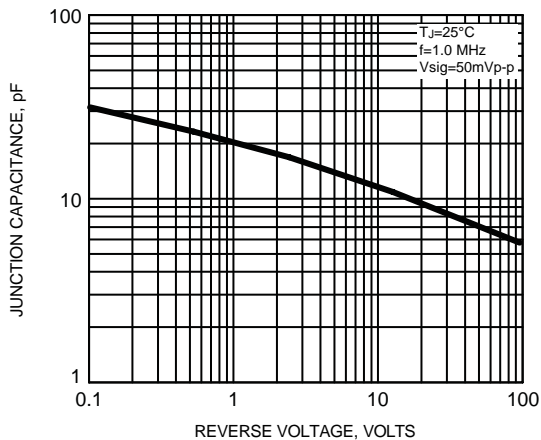


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

