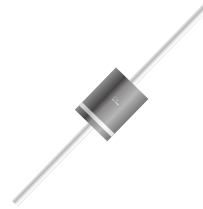


FEATURES

- Glass passivated junction
- For Surface Mount Applications, Easy to pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low forward voltage drop
- High current capability, High reliability
- Low power loss, high efficiency
- High surge current capability
- High speed switching, Low leakage current
- High temperature soldering guaranteed: 260°C/10 seconds at terminals,
- Component in accordance to RoHS 2015/863/EU



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MECHANICAL DATA

- Case: R-6/2.0 molded plastic body
- Terminals: Solder Plated, solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end

TYPICAL APPLICATIONS

For use in low voltage, high frequency inverters, DC/DC converters, free wheeling, and polarity protection applications

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified, Single phase, half wave, 60HZ, resistive or inductive load. For capacitive load, derate current by 20%.)

Parameters	Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage	V_{RM}	400	V
Maximum RMS Voltage	V_{RMS}	283	V
Maximum DC Blocking Voltage	V_{DC}	400	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	20	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	500	A
Maximum Instantaneous Forward Voltage $I_f = 5A$ $I_f = 20A$	V_F	0.98 1.20	V
Maximum DC Reverse Current at rated DC blocking voltage	I_R	$T_j = 25^\circ C$	5.0
		$T_j = 125^\circ C$	100
Maximum reverse recovery time(Note1)	t_{rr}	200	ns
Typical junction capacitance(Note2)	C_j	140	pF
Typical Thermal Resistance(Note3)	$R_{\theta JA}$	45	$^\circ C/W$
	$R_{\theta JL}$	1.5	
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150	$^\circ C$

Note: 1. Test conditions: $I_f = 0.5A, I_r = 1.0A, I_{RR} = 0.25A$.

2. Measured at 1MHz and applied reverse voltage of 4.0 Volts.

3. Thermal resistance junction to lead. Measured in 3 mm distance from case

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

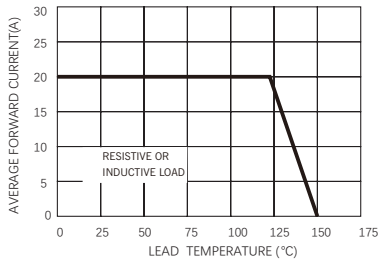


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

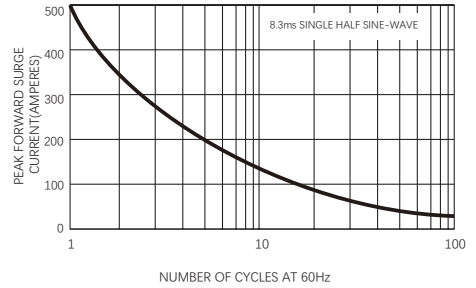


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

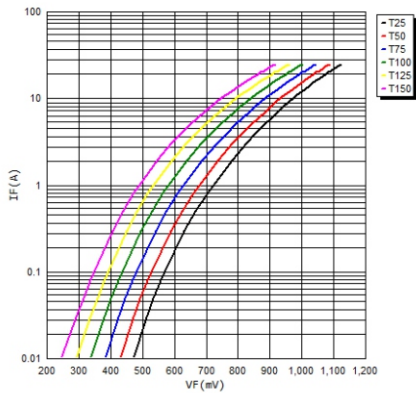


FIG.4-TYPICAL REVERSE CHARACTERISTICS

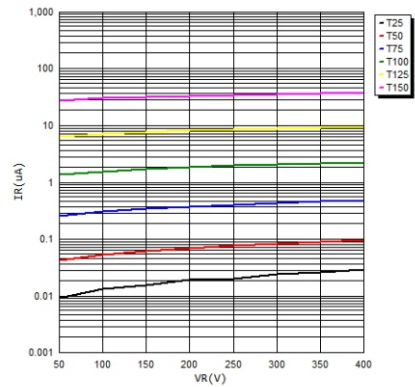
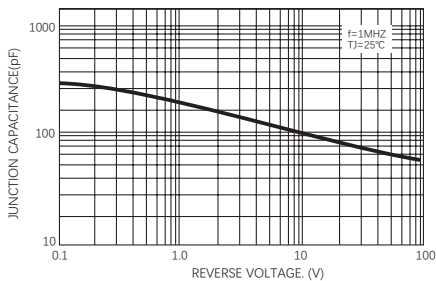
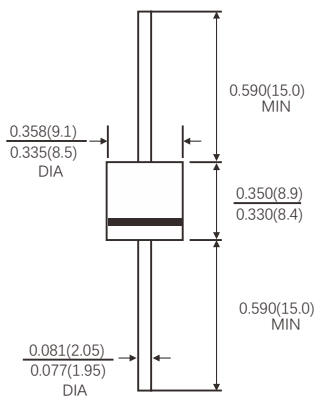


FIG.5-TYPICAL JUNCTION CAPACITANCE



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Dimensions in inches and (millimeters)

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