

MUR440GR

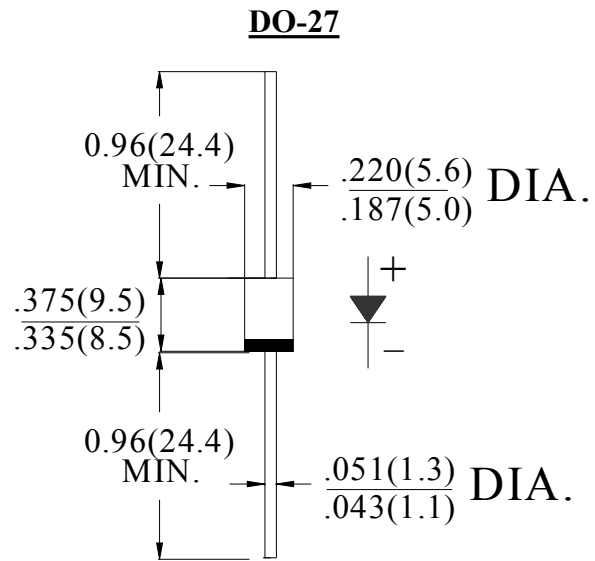
4.0AMPS .GLASS PASSIVATED ULTRA FAST RECTIFIERS

FEATURE

- . High current capability
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High surge capability
- . High temperature soldering guaranteed
260°C /10sec/ 0.375" lead length at 5 lbs tension
- . Superfast recovery time for high efficiency.

MECHANICAL DATA

- . Case: Molded plastic
- . Epoxy: UL94V-0 rate flame retardant
- . Lead: MIL-STD- 202E, Method 208 guaranteed
- . Polarity:Color band denotes cathode end
- . Packaging: 12mm tape per EIA STD RS-481
- . Mounting position: Any



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Type Number	SYM BOL	MUR440	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	400	V
Maximum RMS Voltage	V_{RMS}	280	V
Maximum DC blocking Voltage	V_{DC}	400	V
Maximum Average Forward Rectified Current .375"(9.5mm)lead length at $T_A = 55^\circ C$	$I_{F(AV)}$	4.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	110.0	A
Maximum Forward Voltage at 4.0A DC	V_F	1.28	V
Maximum DC Reverse Current @ $T_A = 25^\circ C$ at rated DC blocking voltage @ $T_A = 100^\circ C$	I_R	10.0 250.0	μA
Maximum Reverse Recovery Time (Note 1)	t_{rr}	50	nS
Typical Junction Capacitance (Note 2)	C_J	60	pF
Typical Thermal Resistance (Note 3)	$R_{(JA)}$	55	$^\circ C/W$
Storage Temperature	T_{STG}	-55 to +150	$^\circ C$
Operation Junction Temperature	T_J	-55 to +150	$^\circ C$

Note:

1. Reverse Recovery test Condition: $I_f=0.5A, I_R=1.0A, I_{RR}=0.25A$;
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 0.375"(9.5mm)lead length, vertical P.C.Board Mounted

RATING AND CHARACTERISTIC CURVES (MUR440GR)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

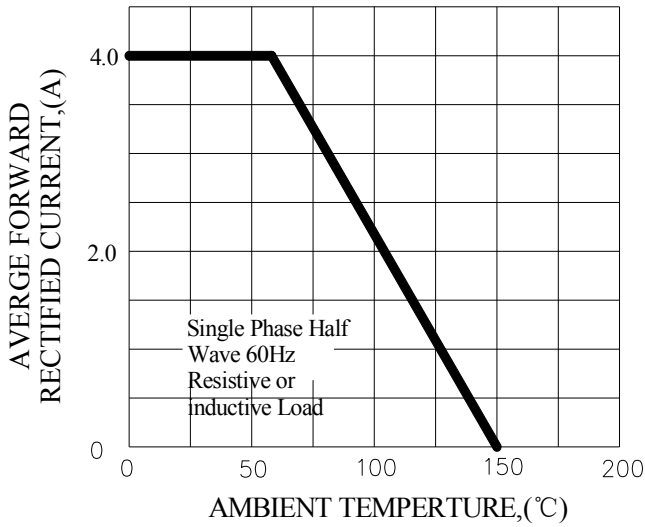


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

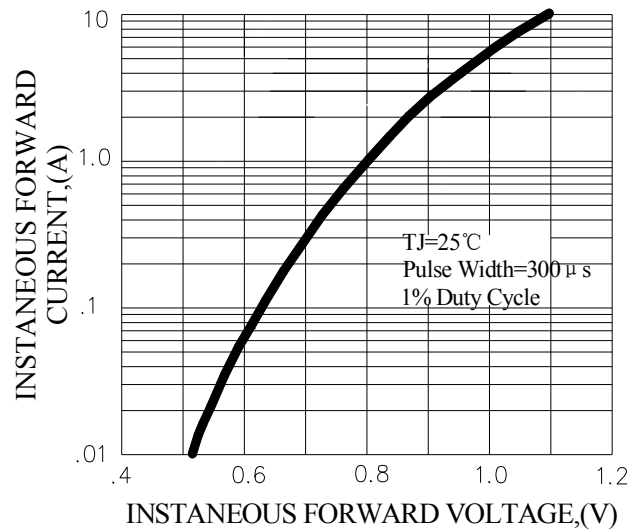


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

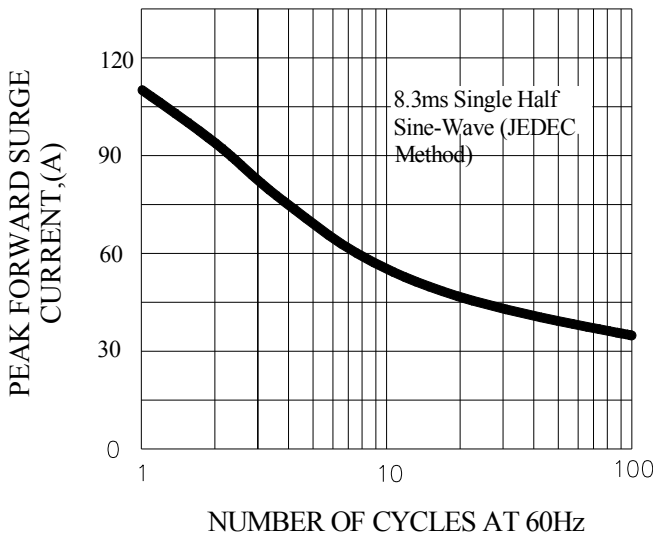


FIG.4-TYPICAL REVERSE CHARACTERISTICS

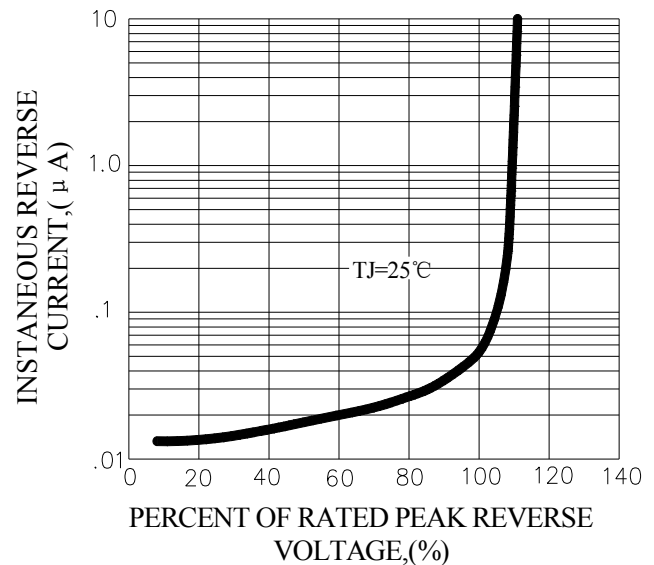
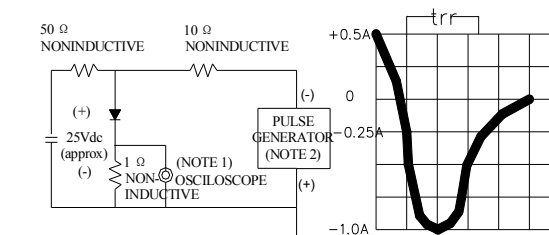


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES:1. Rise Time=7ns max, Input Impedance= 1 megohm, 22pF.
2. Rise Time=10ns max, Source Impedance= 50 ohms.