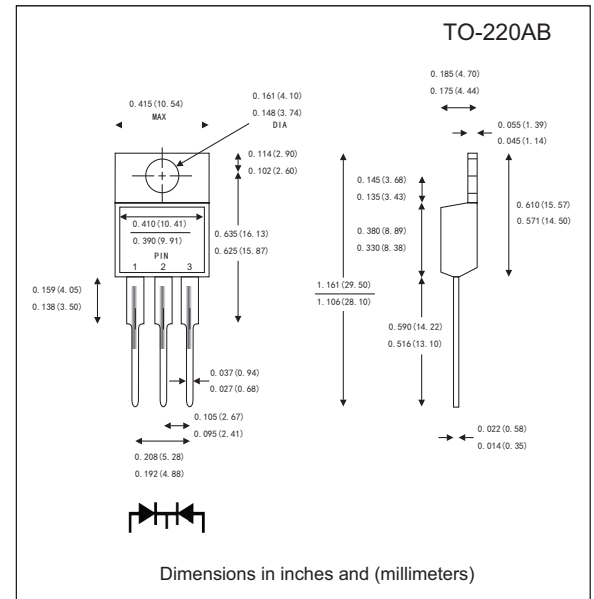


GLASS PASSIVATED SUPER FAST RECTIFIER

FEATURES

- High Performance & Reliability best suited for Automotive application
- Plastic package has Underwriters Laboratory Flammability Classification
- 94V-0 Fast switching for high efficiency
- Low forward voltage drop
- Single rectifier construction
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 260 °C/10 seconds, 0.25" (6.35mm) from case
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



MECHANICAL DATA

- Case: JEDEC TO-220 AC molded plastic body
- Epoxy: UL94V-0 rate flame retardant
- Lead: Plated axial leads, solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.08ounce, 2.24 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbols	MUR 1010CT	MUR 1020CT	MUR 1040CT	MUR 1060CT	Units
Maximum repetitive peak reverse voltage	V_{RRM}	100	200	400	600	Volts
Maximum RMS voltage	V_{RMS}	70	140	280	420	Volts
Maximum DC blocking voltage	V_{DC}	100	200	400	600	Volts
Maximum Average Forward Rectified Current 0.375" (9.5mm) lead length at $T_A=55$ °C	Per leg	5.0				Amp
	Total device	10.0				
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	125				Amps
Maximum Instantaneous Forward Voltage at 10.0 A	V_F	0.975		1.3	1.7	Volts
Maximum DC Reverse Current at rated DC blocking voltage	$T_A=25$ °C	5.0		10.0		μA
	$T_A=125$ °C	500.0				
Maximum reverse recovery time (Note 2)	T_{RR}	35				ns
Typical thermal resistance (Note 3)	$R_{\theta JC}$	1.5				°C/W
Operating junction and storage temperature range	T_J / T_{STG}	-40 to +150				°C

Notes:

1. Pulse test: 300 μs pulse width 1% duty cycle
2. Reverse recovery test conditions $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.5A$
3. Thermal resistance from junction to case

GLASS PASSIVATED SUPER FAST RECTIFIER

RATINGS AND CHARACTERISTIC CURVES MUR1010CT - MUR1060CT

FIG.1-FORWARD CURRENT DERATING CURVE

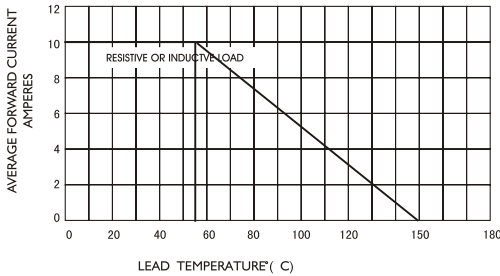


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

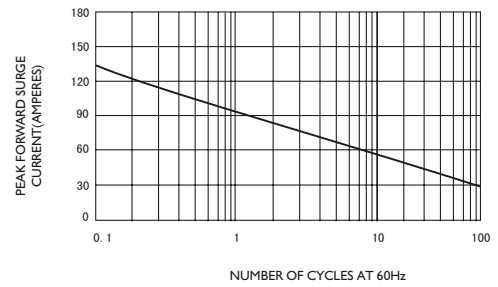


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

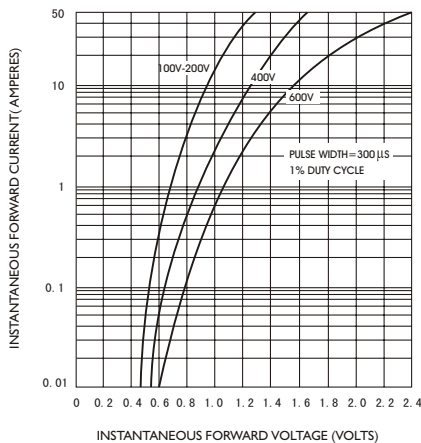


FIG.4-TYPICAL REVERSE CHARACTERISTICS

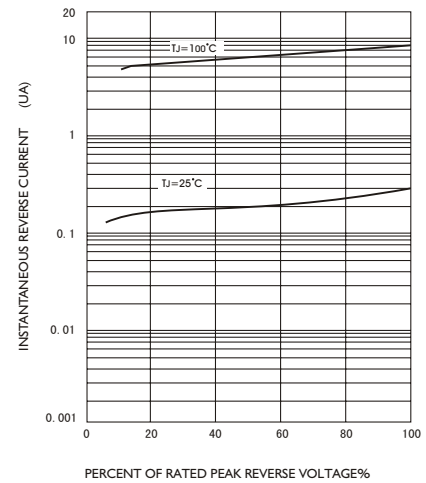


FIG.5-TYPICAL JUNCTION CAPACITANCE

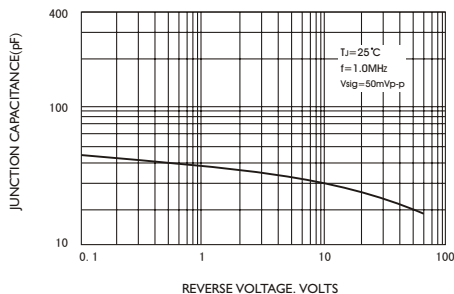
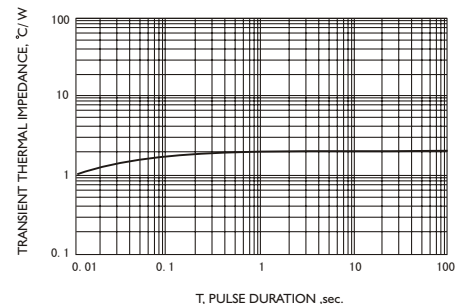


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE



Disclaimer

All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.