



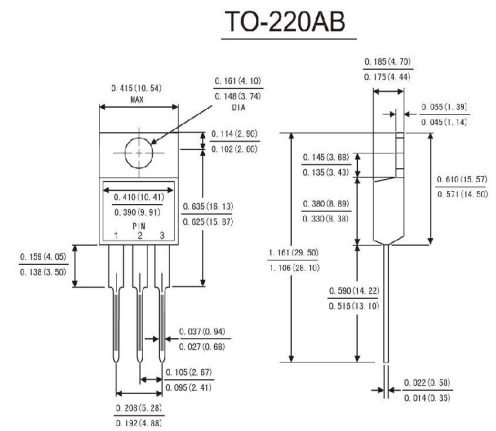
GLASS PASSIVATED SUPER FAST RECTIFIER

MUR1010CT - MUR1060CT

Voltage Range - 100 to 600 V
Forward Current - 10 A

FEATURES

- 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



Dimensions in inches and (millimeters)

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 TA=55 C	Per leg	I _(AV)	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 4.0 A		V _F	0.975		1.3	1.7	Volts
Maximum DC Reverse Current at rated DC blocking voltage	Ta=25 °C	I _R	5.0		10.0		μA
	Ta=125 °C		500.0				
Maximum reverse recovery time (Note 2)		T _{RR}	35				ns
Typical thermal resistance (Note 3)		R _{θJC}	1.5				°C/W
Operating junction and storage temperature range		T _J / T _{STG}	-40 to +150				°C

Notes:

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



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RATINGS AND CHARACTERISTIC CURVES MUR1010CT - MUR1060CT

FIG.1-FORWARD CURRENT DERATING CURVE

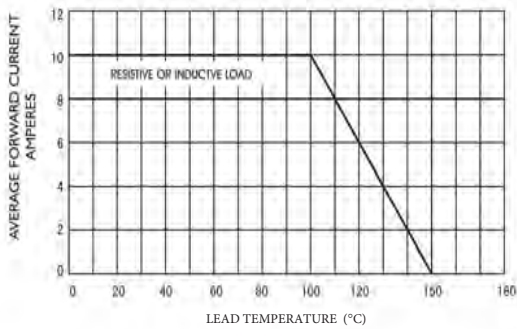


FIG.2-MAXIMUM NON-REPETITIVE
PEAK FORWARD SURGE CURRENT

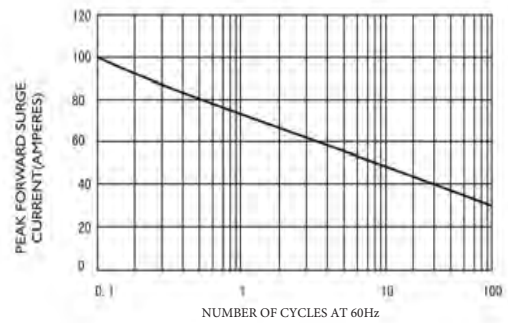


FIG.3-TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

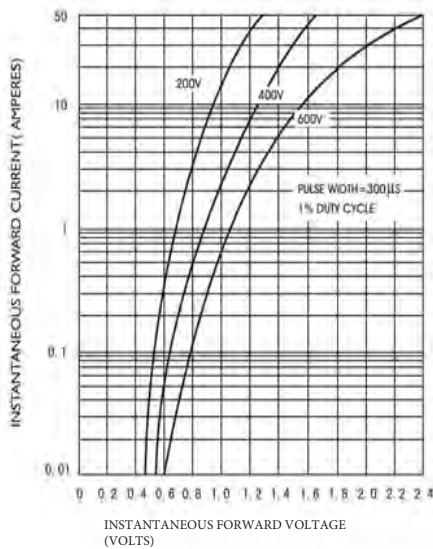


FIG.4-TYPICAL REVERSE CHARACTERISTICS

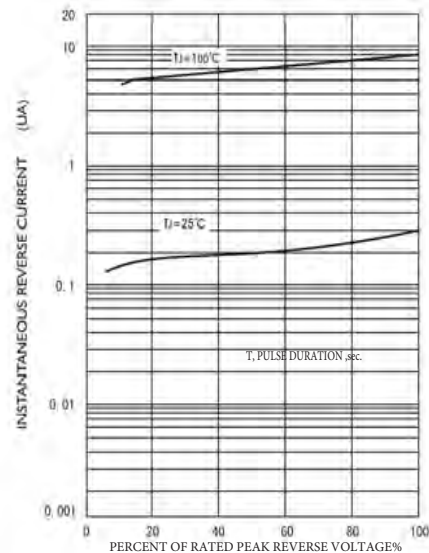


FIG.5-MAXIMUM NON-REPETITIVE FORWARD
SURGE CURRENT

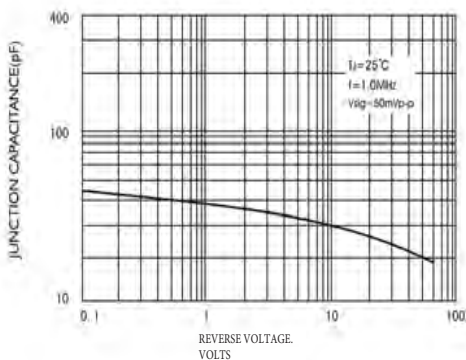


FIG.6-TYPICAL JUNCTION CAPACITANCE

