SEMI CONDUCTOR

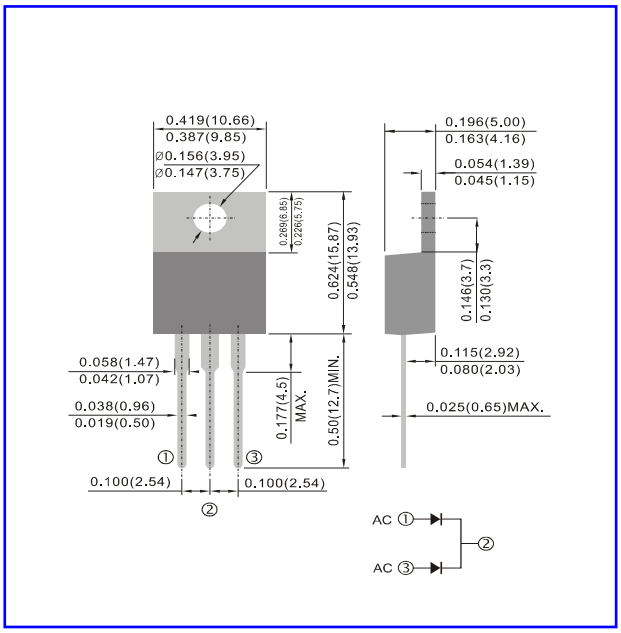
MUR16200CT

Glass Passivated Super Fast Rectifiers

200Volts	CURRENT	16 Amperes

T0-220AB

Unit : inch(mm)



Features

- ✧ High efficiency, low VF
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability
- ✧ Low power loss.
- ✧ For use in low voltage, high frequency inventor, free wheeling, and polarity protection application

Mechanical Data

- ✧ Case: TO-220AB Molded plastic
- ✧ Epoxy: UL 94V-0 rate flame retardant
- ✧ Terminals: Pure tin plated, lead free. solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: As marked
- ✧ High temperature soldering guaranteed: 260°C/10 seconds .16",(4.06mm) from case.
- ✧ Weight: 2.24 grams

Maximum Ratings and Electrical Characteristics

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

Type Number	Symbol	MUR16200CT	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	V
Maximum RMS Voltage	V_{RMS}	140	V
Maximum DC Blocking Voltage	V_{DC}	200	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @T_C = 100 °C	$I_{(AV)}$	16	A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150	A
Maximum Instantaneous Forward Voltage @ 5.0A	V_F	0.975	V
Maximum DC Reverse Current @ T_A=25 °C at Rated DC Blocking Voltage @ T_A=100 °C	I_R	1.0 400	uA uA
Maximum Reverse Recovery Time (Note 1)	Trr	35	nS
Typical Junction Capacitance (Note 2)	Cj	80	pF
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$	1.5	°C/W
Operating Temperature Range	T_J	-65 to +150	°C
Storage Temperature Range	T_{STG}	-65 to +150	°C

Notes: 1. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.
3. Mounted on Heatsink Size of 2" x 3" x 0.25" Al-plate.

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FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

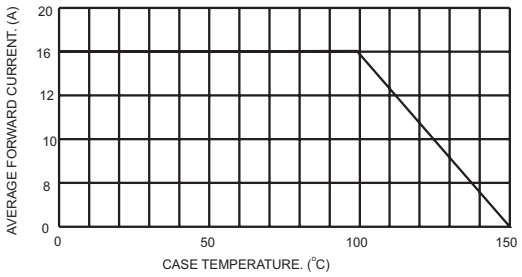

FIG.2- TYPICAL REVERSE CHARACTERISTICS

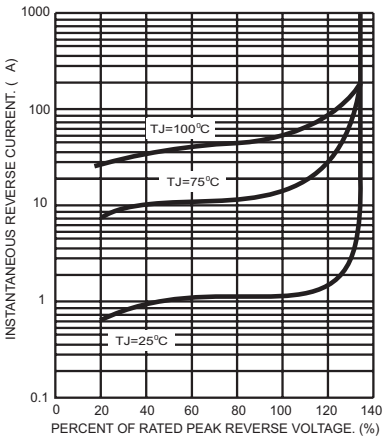

FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

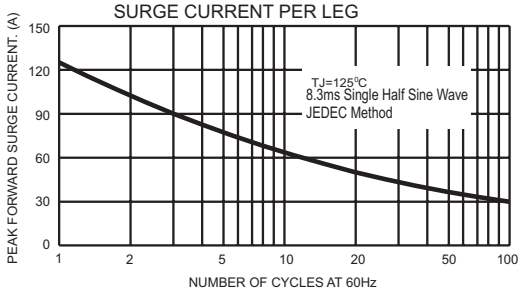

FIG.5- TYPICAL FORWARD CHARACTERISTICS PER LEG

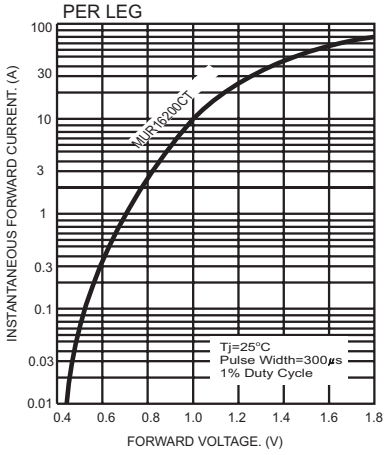

FIG.4- TYPICAL JUNCTION CAPACITANCE PER LEG

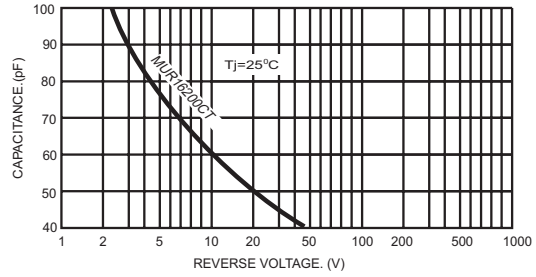

FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM