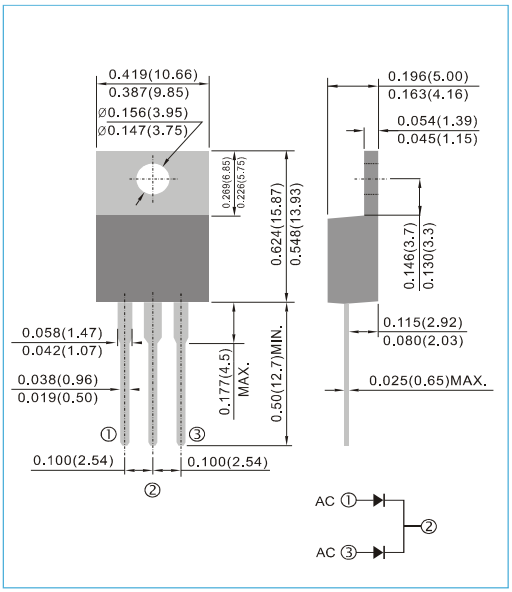
SEMI CONDUCTOR

MUR20600CT

ULTRAFAST RECOVERY RECTIFIERS

VOLTAGE 600Volts **CURRENT** 20 Amperes

TO-220AB Unit : inch(mm)



FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency.
- Low forward voltage, high current capability
- High surge capacity.
- Ultra fast recovery times, high voltage.

MECHANCALDATA

- Case: TO-220AB full molded plastic package
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Standard packaging: Any
- Weight: 0.0655 ounces, 1.859 grams.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%

PARAMETER	SYMBOL	MUR20600CT	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	v
Maximum RMS Voltage	V_{RMS}	420	v
Maximum DC Blocking Voltage	V_{DC}	600	v
Maximum Average Forward Current lead length at T_C = 100°C	$I_{F(AV)}$	20	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150	A
Maximum Forward Voltage at 10A	V_F	1.7	v
Maximum DC Reverse Current at Rated DC Blocking Voltage T_J=25°C T_J=125°C	I_R	1 500	µA
Typical Junction Capacitance (Note 1)	C_J	200	pF
Maximum Reverse Recovery Time (Note 2)	t_{rr}	50	ns
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$	2	°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-65 to +150	°C

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
2. Reverse Recovery Test Conditions: I_F=.5A, I_R=1A, Irr=.25A.
3. Thermal resistance from Junction to ambient and from junction to lead

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RATING AND CHARACTERISTIC CURVES

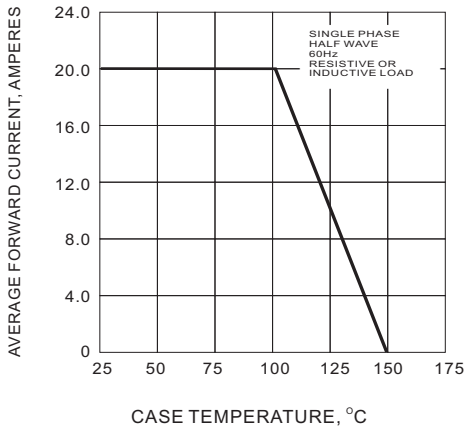

Fig.1 FORWARD CURRENT DERATING CURVE

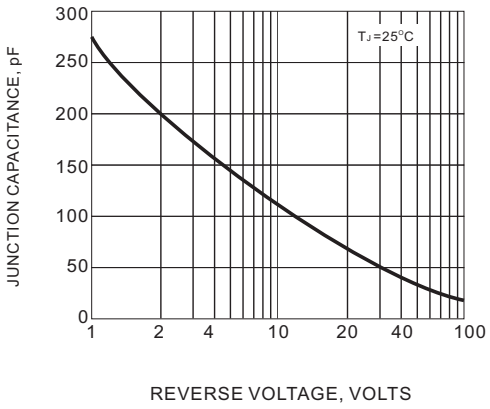

Fig.2 TYPICAL JUNCTION CAPACITANCES

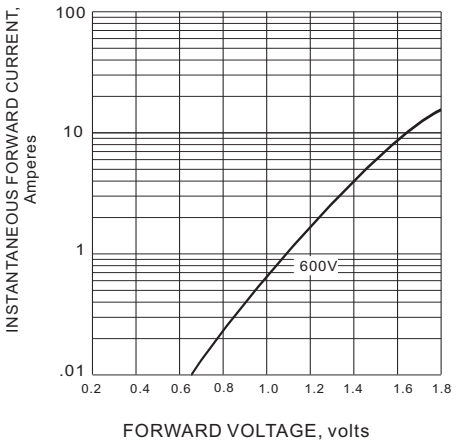

Fig.3 FORWARD CHARACTERISTICS

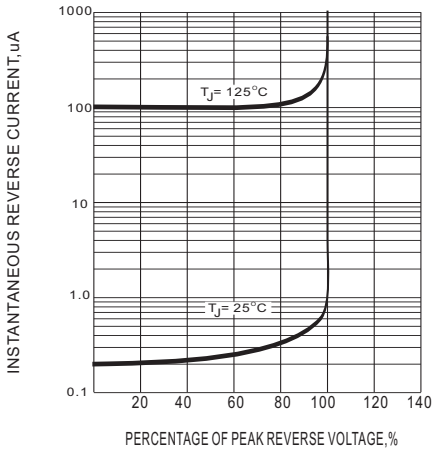

Fig.4 TYPICAL REVERSE CHARACTERISTICS

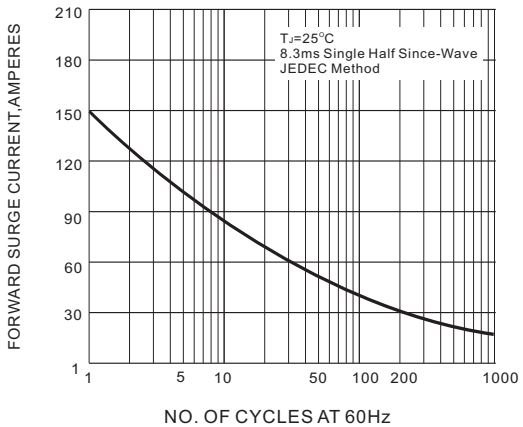

Fig.5 PEAK FORWARD SURGE CURRENT