

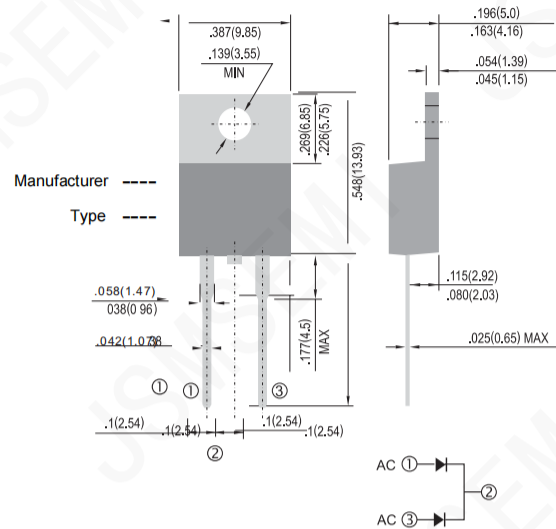
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. 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.
- Super fast recovery times, high voltage.
- Epitaxial chip construction.

MECHANICAL DATA

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

CURRENT: 16.0 Amps VOLTAGE: 50 ~ 600 V



MAXIMUM RATING 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	MUR1605	MUR1600	MUR1610	MUR1620	MUR1630	MUR1640	MUR1660	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V _{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	300	400	600	V
Maximum Average Forward Current at Tc =90°C	I _{F(AV)}	16.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	125							A
Maximum Forward Voltage at 8A	V _F	0.95				1.30		1.70	V
Maximum DC Reverse Current at T _j =25°C Rated DC Blocking VoltageT _j =100°C	I _R	1.0 500							μA
Maximum Reverse Recovery Time (Note 2)	t _{rr}	35							ns
Typical Junction capacitance (Note 1)	C _J	62							pF
Typical Thermal Resistance	R _{θJC}	3.0							°C / W
Operating and Storage Temperature Range	T _J ,T _{STG}	-50 to +150							°C

NOTES:

- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- Reverse Recovery Test Conditions: $I_F = 5\text{A}$, $I_R = 1\text{A}$, $I_{rr} = 25\text{A}$.
- Both Bonding and Chip structure are available.

RATING AND CHARACTERISTIC CURVES

Fig.1-FORWARD CURRENT DERATING CURVE

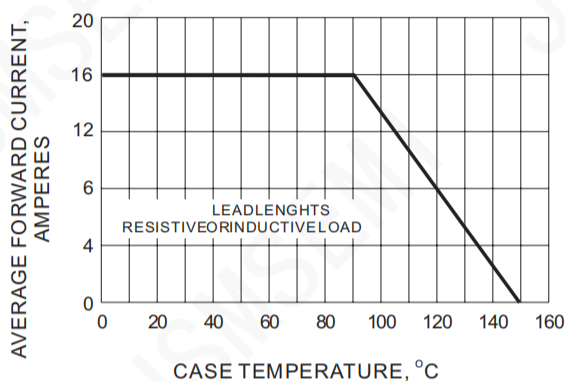


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

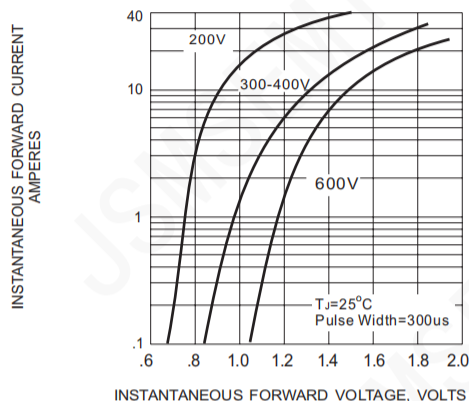


FIG.3-TYPICAL REVERSE CHARACTERISTICS

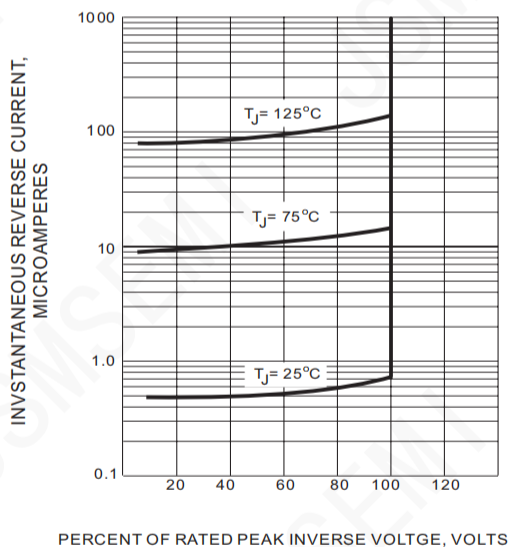


Fig.4-MAXIMUM NON-REPETITIVE SURGE CURRENT

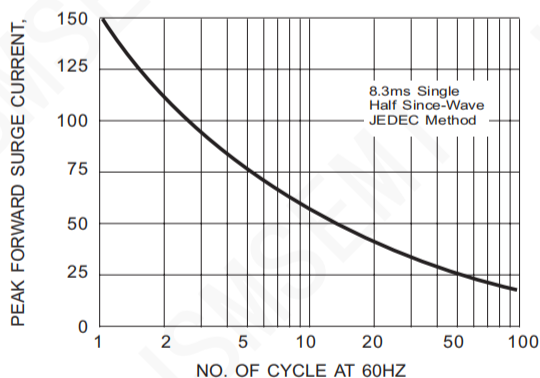


Fig.5-TYPICAL JUNCTION CAPACITANCE

