

FEATURES

- Superfast recovery times-epitaxial construction.
- Low forward voltage, high current capability.
- Exceeds environmental standards of MIL-S-19500/228.
- Hermetically sealed.
- Low leakage.
- High surge capability.
- Plastic package has Underwriters Laboratories Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- In compliance with EU RoHS 2002/95/EC directives



MECHANICAL DATA

- Case: Molded plastic, TO-220F-2
- Terminals: Axial leads, solderable to MIL-STD-750, Method 2026
- Polarity: As marking
- Weight: 0.0655 ounces, 1.859 grams.

TO-220F-2

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

PARAMETER	YMBOL	MURF 810G	MURF 820G	MURF 830G	MURF 840G	MURF 850G	MURF 860G	MURF 890G	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	300	400	500	600	700	V
Maximum RMS Voltage	V_{RMS}	70	140	210	280	350	420	490	V
Maximum DC Blocking Voltage	V_{DC}	100	200	300	400	500	600	700	V
Maximum Average Forward Current at $T_c=75^{\circ}\text{C}$	$I_{F(AV)}$	8.0							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 8.0A (Note 1)	V_F	1.0			1.5		1.7	2.0	V
Maximum DC Reverse Current $T_J=25^{\circ}\text{C}$ at Rated DC Blocking Voltage $T_J=100^{\circ}\text{C}$	I_R	1.0 300							μA
Maximum Reverse Recovery Time (Note 1)	t_{rr}	35							ns
Typical Junction capacitance(Note 2)	C_J	65							pF
Typical thermal Resistance (Note 3)	$R_{\theta JC}$	3.0							$^{\circ}\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^{\circ}\text{C}$

NOTES:

1. Pulse Test with PW=300 usec, 2% Duty Cycle.
2. Reverse Recovery Tset Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$
3. Mounted on P.C. Board with 14mm² (.013mm thick) copper pad areas.

RATING AND CHARACTERISTIC CURVES

Fig.1-FORWARD CURRENT DERATING CURVE

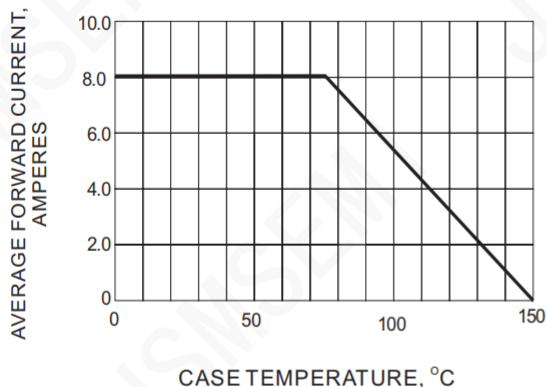


Fig.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

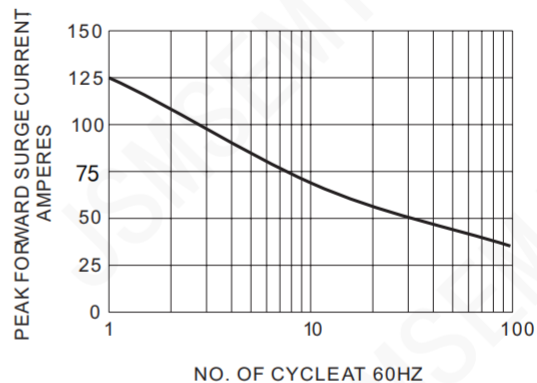


Fig.3-TYPICAL REVERSE CHARACTERISTICS

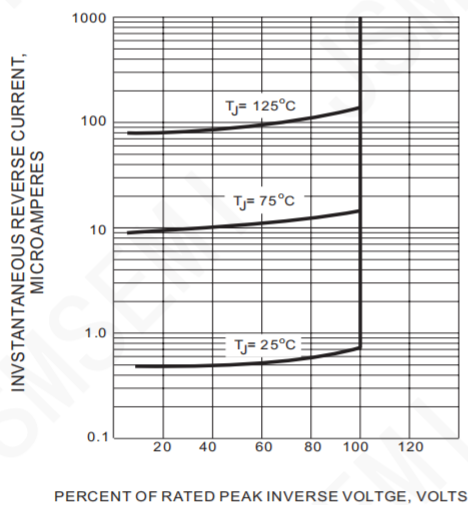
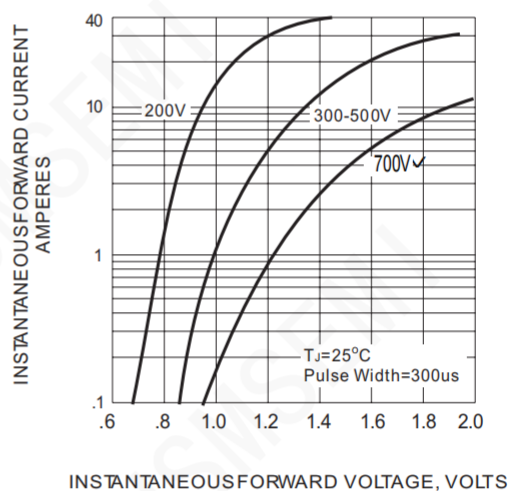
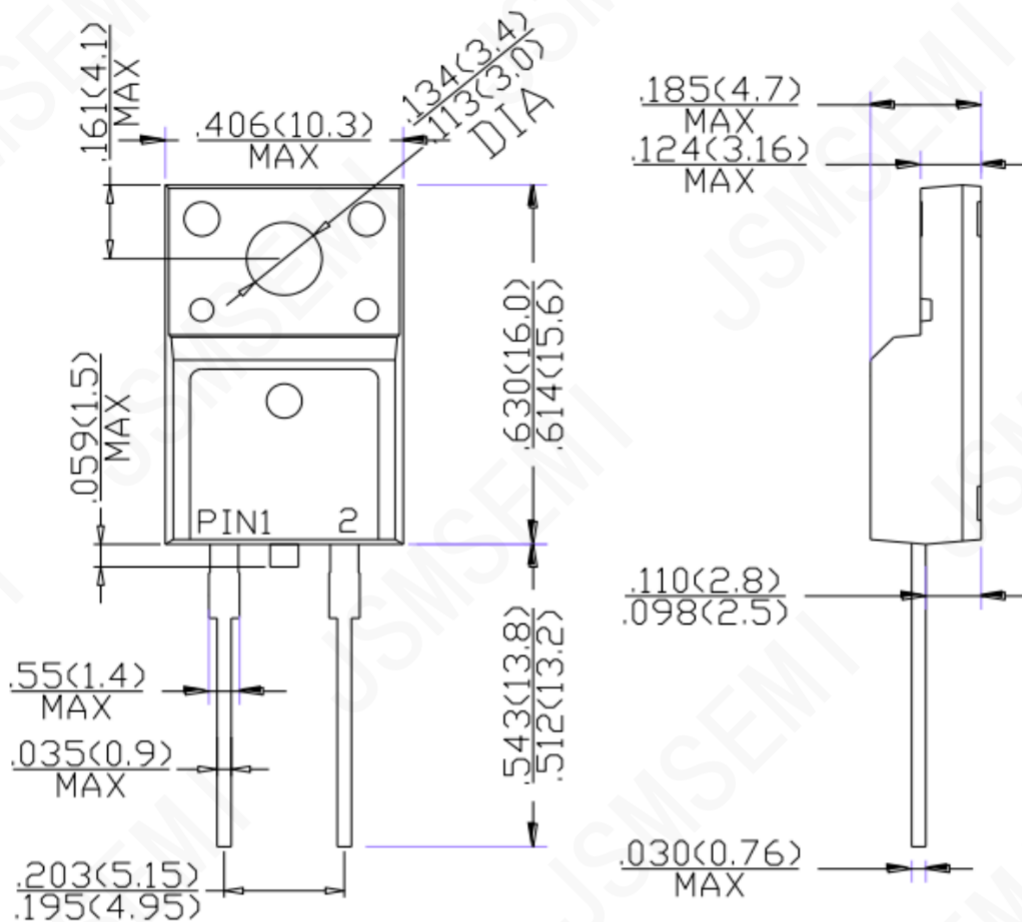


Fig.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



Package Information

TO-220F-2



Dimensions in inches and (millimeters)