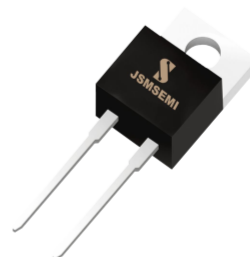


FEATURES

- 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

CURRENT: 8.0 Amps

VOLTAGE: 100~700 V

**TO220-2L
Package**
MECHANICAL DATA

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Resistive or inductive load, 60Hz.

PARAMETER	YMBOL	MUR 810G	MUR 820G	MUR 830G	MUR 840G	MUR 850G	MUR 860G	MUR 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

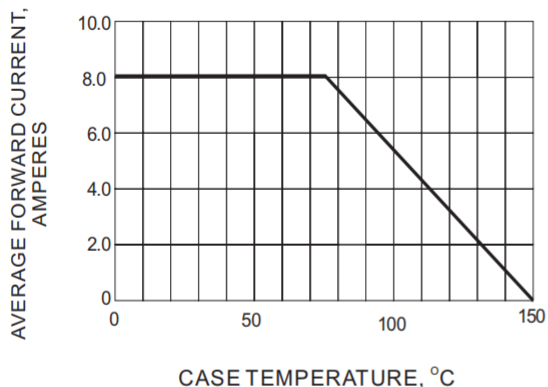


Fig.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

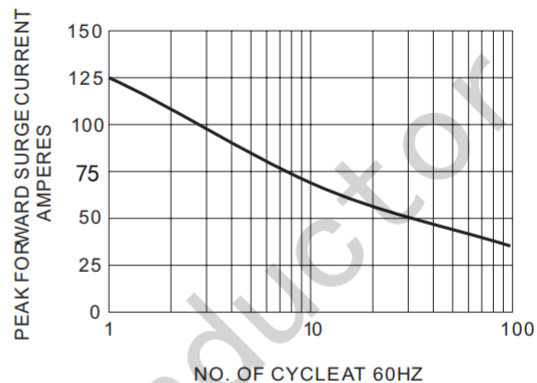


Fig.3-TYPICAL REVERSE CHARACTERISTICS

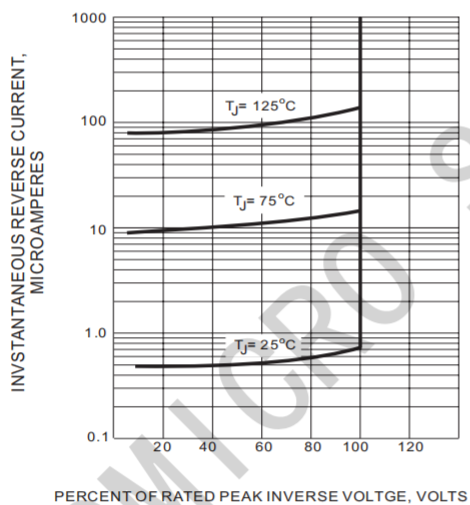
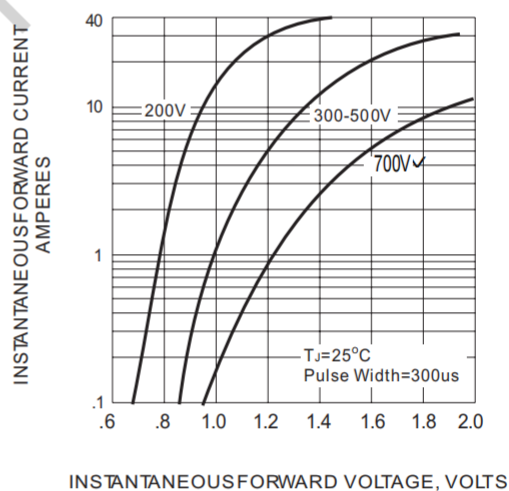
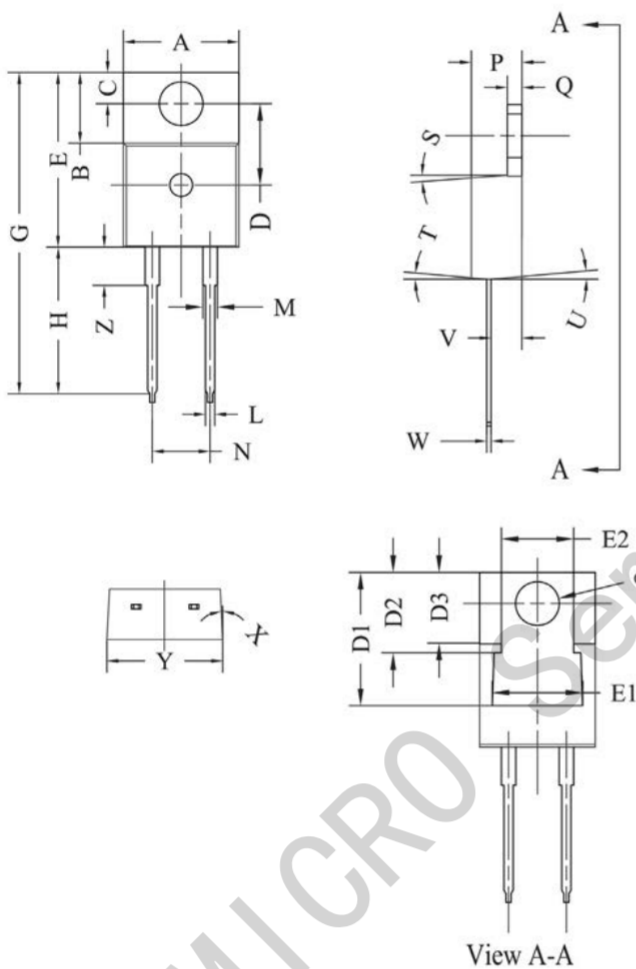


Fig.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



Package Information

TO-220-2L



POS	Inches		Millimeters	
	Min	Max	Min	Max
A	.381	.410	9.677	10.414
B	.235	.255	5.969	6.477
C	.100	.120	2.540	3.048
D	.223	.337	5.664	8.560
D1	.457-.490		11.60-12.45 typ	
D2	.277-.303 typ		7.04-7.70 typ	
D3	.244-.252 typ		6.22-6.4 typ	
E	.590	.615	14.986	15.621
E1	.302	.326	7.68	8.28
E2	.227	.251	5.77	6.37
F	.143	.153	3.632	3.886
G	1.105	1.147	28.067	29.134
H	.500	.550	12.700	13.970
L	.025	.036	.635	.914
M	.045	.055	1.143	1.550
N	.195	.205	4.953	5.207
P	.165	.185	4.191	4.699
Q	.048	.054	1.219	1.372
S	3°	6°	3°	6°
T	3°	6°	3°	6°
U	3°	6°	3°	6°
V	.094	.110	2.388	2.794
W	.014	.025	.356	.635
X	3°	5.5°	3°	5.5°
Y	.385	.410	9.779	10.414
Z	.130	.150	3.302	3.810

NOTE:

1. Dimension L, M, W apply for Solder Dip Finish