## 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 forwrd voltge, high current capability
- High surge capacity.
- Super fast recovery times, high voltage.
- In compliance with EU RoHS 2002/95/EC directives
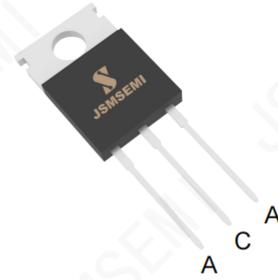
MECHANICAL DATA

- Case: ITO-220 Molded plastic
- Terminals: Lead solderable per MIL-STD-750, Method 2026

- Polarity: As marked.
- Standard packaging: Any
- Weight: 0.0655 ounces, 1.859grams.

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	MURF3005CT	MURF3010CT	MURF3015CT	MURF3020CT	MURF3030CT	MURF3040CT	MURF3060CT	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 =100°C	$I_{F(AV)}$				30.0				A
Peak Forward Surge Current, 8.3ms single half sine- waves superimposed on rated load(JEDEC method)	I_{FSM}				150				A
Maximum Forward Voltage at 5A, per element	V_F			1.00			1.30	1.7	V
Maximum DC Reverse Current at T_J=25°C Rated DC Blocking Voltage T_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	$R_{\theta JC}$				3.0				°C / W
Operating Junction and Storage Temperature Range	T_J, T_{STG}				-55 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. Both Bonding and Chip structure are available.

RATING AND CHARACTERISTIC CURVES

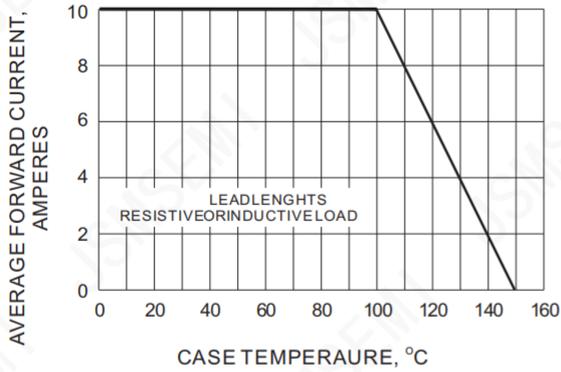Fig.1-FORWARD CURRENT DERATING CURVE

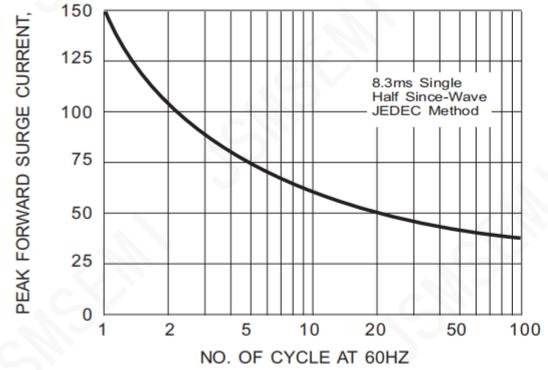Fig.2-MAXIMUM NON-REPETITIVE SURGE CURRENT
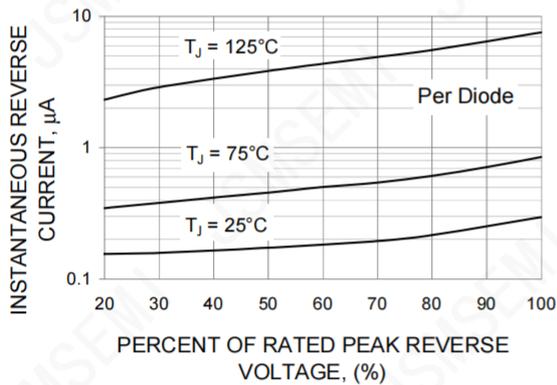

Fig.3-TYPICAL REVERSE CHARACTERISTIC
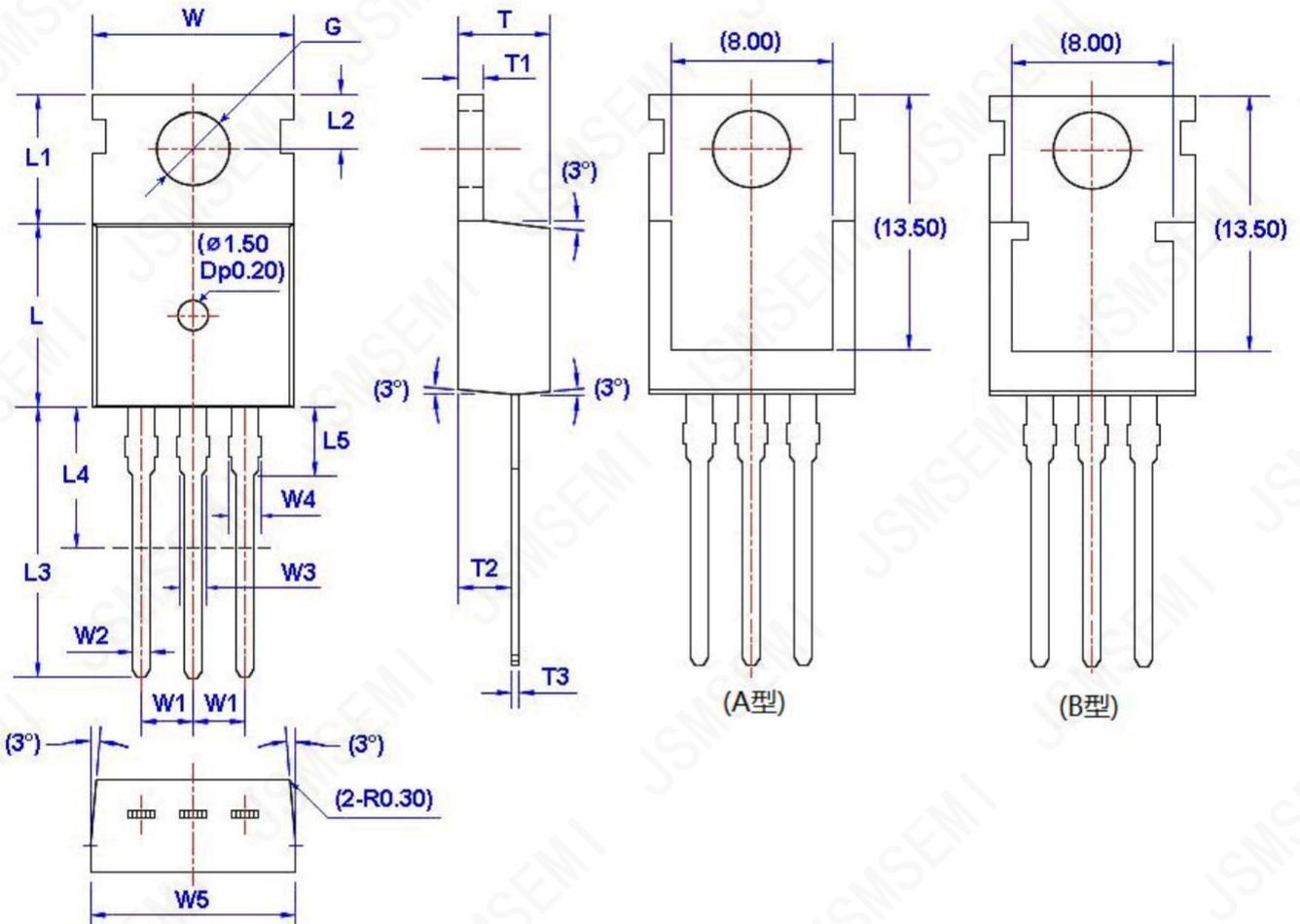

Fig.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC
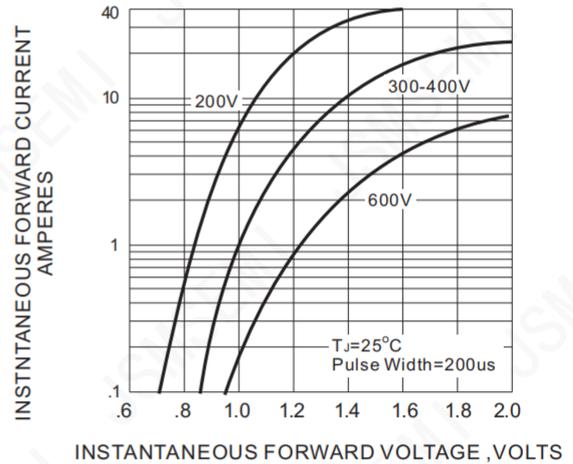
Package Information

TO-220

(A型) (B型)

Unit: mm

Symbol	Size		Symbol	Size		Symbol	Size		Symbol	Size	
	Min	Max		Min	Max		Min	Max		Min	Max
W	9.66	10.28	W5	9.80	10.20	L4**	6.20	6.60	T3	0.45	0.60
W1	2.54（TYP）		L	9.00	9.40	L5	2.79	3.30	G(Φ)	3.50	3.70
W2	0.70	0.95	L1	6.40	6.80	T	4.30	4.70			
W3	1.17	1.37	L2	2.70	2.90	T1	1.15	1.40			
W4*	1.32	1.72	L3	12.70	14.27	T2	2.20	2.60			

Revision History

Rev.	Change	Date
V1.0	Initial version	6/27/2021

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