SFF10A05CTG-SFF10A60CTG
SUPERFAST RECOVERY RECTIFIERS

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

TO-220F

MECHANICAL DATA

- Case: ITO-220F 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	SFF10A05 CTG	SFF10A10 CTG	SFF10A10A CTG	SFF10A20 CTG	SFF10A30 CTG	SFF10A40 CTG	SFF10A60 CTG	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	$I_{F(AV)}$	10.0							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 5A, per element	V_F	0.95				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

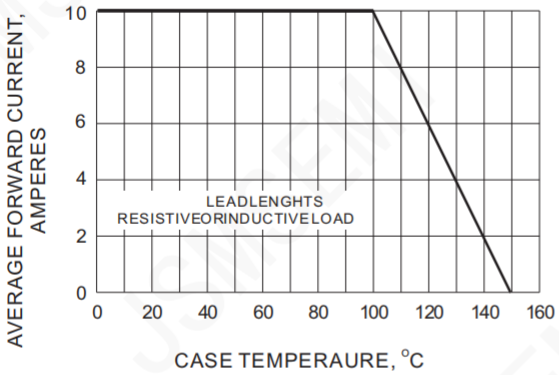

Fig.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

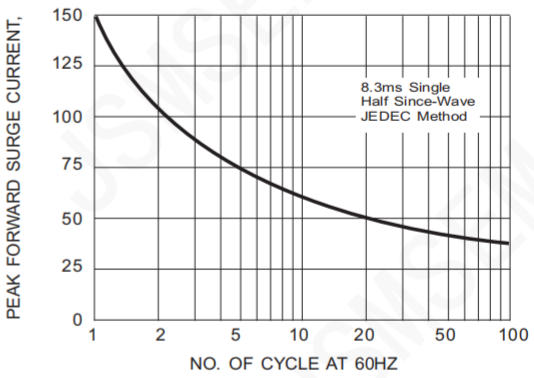

Fig.3-TYPICAL REVERSE CHARACTERISTIC

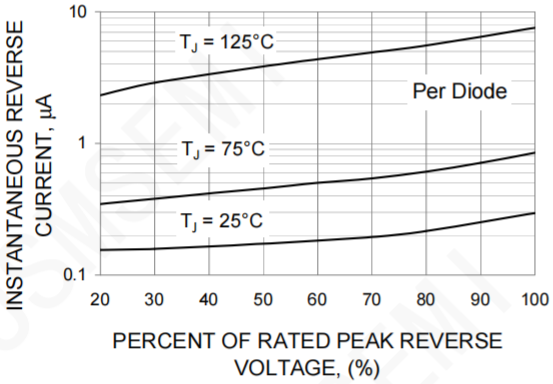

Fig.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC