

CURRENT 16 Ampere
 VOLTAGE RANG 200 to 1000 Volts

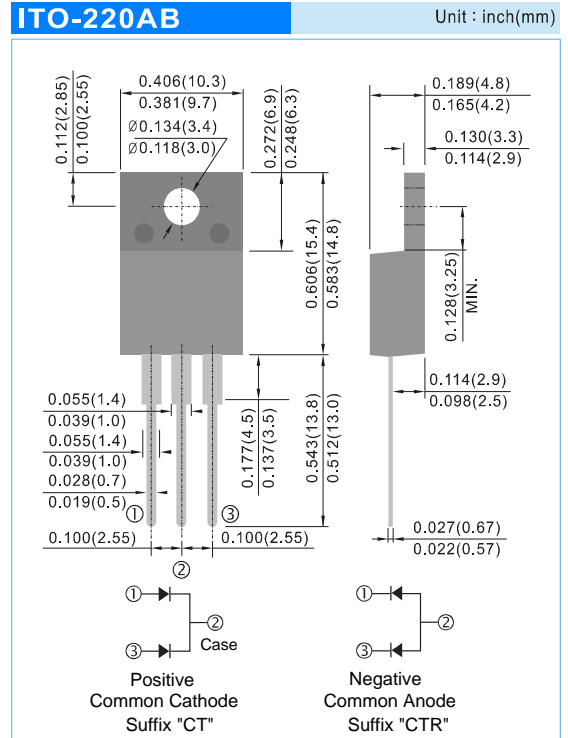
SFF1602 THRU SFF1610

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Low power loss, high efficiency.
- Low forward voltage, high current capability
- High surge capacity.
- Super fast recovery times, high voltage.
- Epitaxial chip construction.
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: ITO-220AB Molded plastic
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Standard packaging: Any
- Weight: 0.056 ounces, 1.6 grams.



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	SFF1602	SFF1604	SFF1606	SFF1608	SFF1610	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	200	400	600	800	1000	V
Maximum Average Forward Current at $T_c = 90^\circ C$	$I_{F(AV)}$	16					A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	175					A
Maximum Forward Voltage at 8A	V_F	0.95	1.3	1.5	1.7	1.9	V
Maximum DC Reverse Current at $T_j = 25^\circ C$ Rated DC Blocking Voltage $T_j = 100^\circ C$	I_R	10 500					μA
Maximum Reverse Recovery Time (Note 2)	t_{rr}	35			50		ns
Typical Junction Capacitance (Note 1)	C_j	62					pF
Typical Thermal Resistance	$R_{\theta JC}$	3					$^\circ C / W$
Operating and Storage Temperature Range	T_j, T_{STG}	-50 to +150					$^\circ C$

NOTES :

1. Measured at 1 MHz and applied reverse voltage of 4 VDC.
2. Reverse Recovery Test Conditions: $I_F = 0.5A$, $I_R = 1A$, $I_{rr} = 0.25A$.
3. Both Bonding and Chip structure are available.

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RATING AND CHARACTERISTIC CURVES

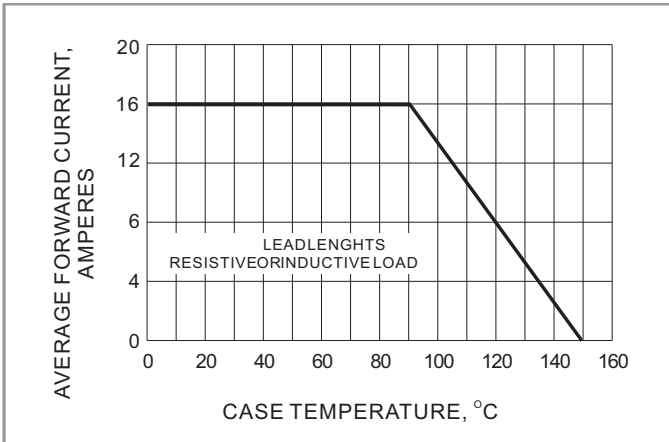


Fig.1- FORWARD CURRENT DERATING CURVE

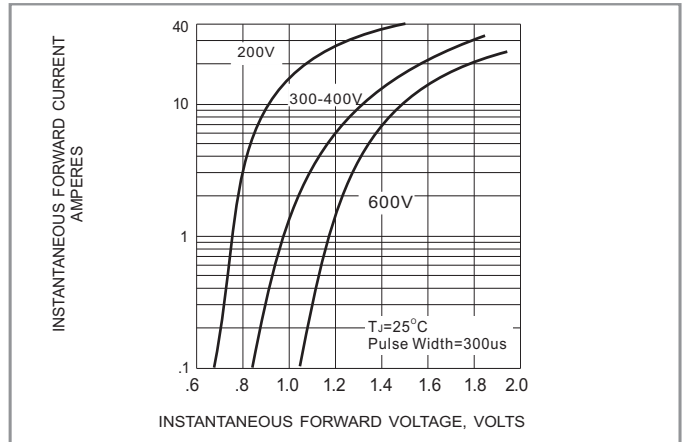


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

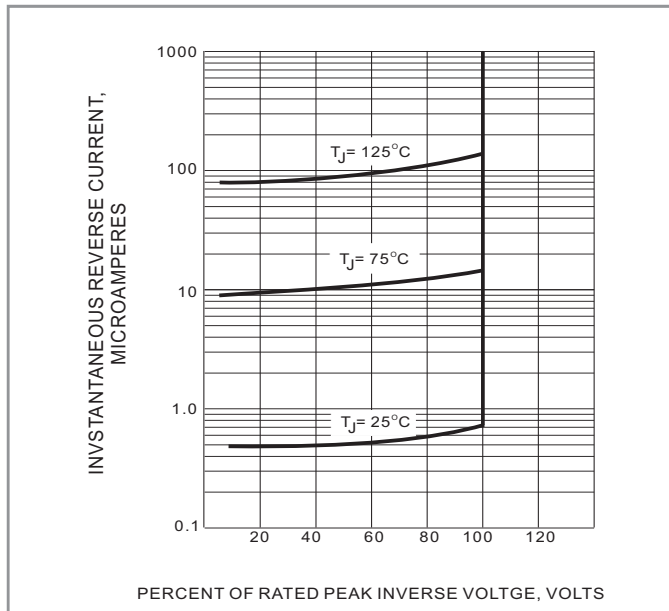


FIG.3 TYPICAL REVERSE CHARACTERISTICS

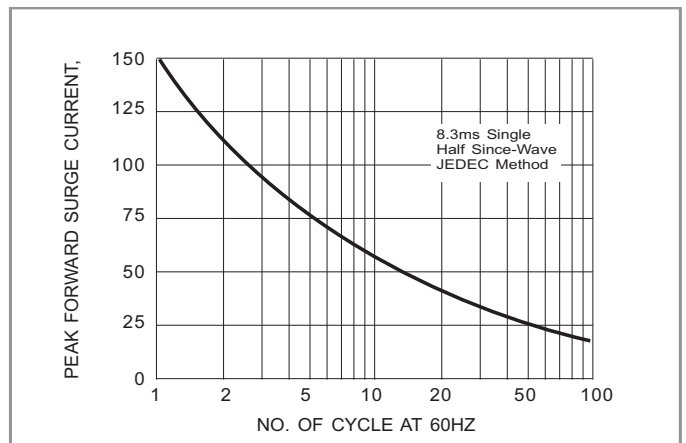


Fig.4- MAXIMUM NON - REPETITIVE SURGE CURRENT

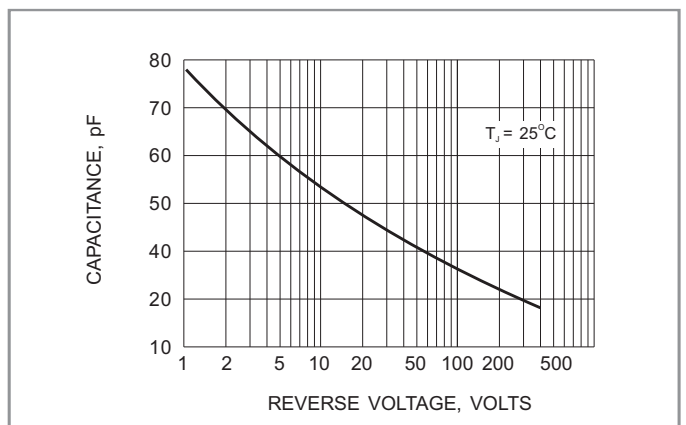


Fig.5- TYPICAL JUNCTION CAPACITANCE