

CURRENT 20 Ampere  
VOLTAGE RANG 200 to 1000 Volts

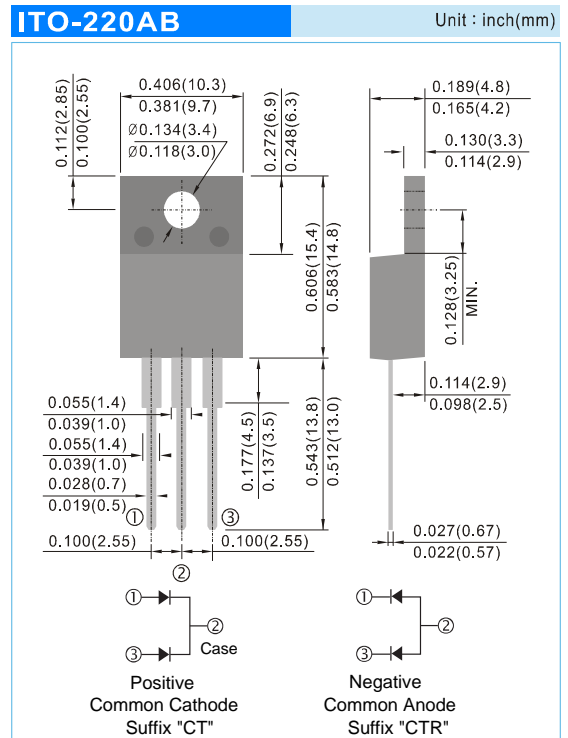
## SFF2002 THRU SFF2010

### 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 2.0
- Green molding compound as per IEC 61249 standard

### 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	SFF2002	SFF2004	SFF2006	SFF2008	SFF2010	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	$I_{F(AV)}$	20					A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	200					A
Maximum Forward Voltage at 10A	$V_F$	0.95	1.3	1.5	1.7	1.9	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J = 25^\circ C$ $T_J = 100^\circ C$	$I_R$	10 500					$\mu A$
Maximum Reverse Recovery Time (Note 2)	$t_{rr}$	35			50		ns
Typical Junction Capacitance (Note 1)	$C_J$	85					pF
Typical thermal Resistance (Note 3)	$R_{\theta jc}$	3					$^\circ C / W$
Operating Junction 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

