

## ULTRAFAST RECOVERY RECTIFIERS

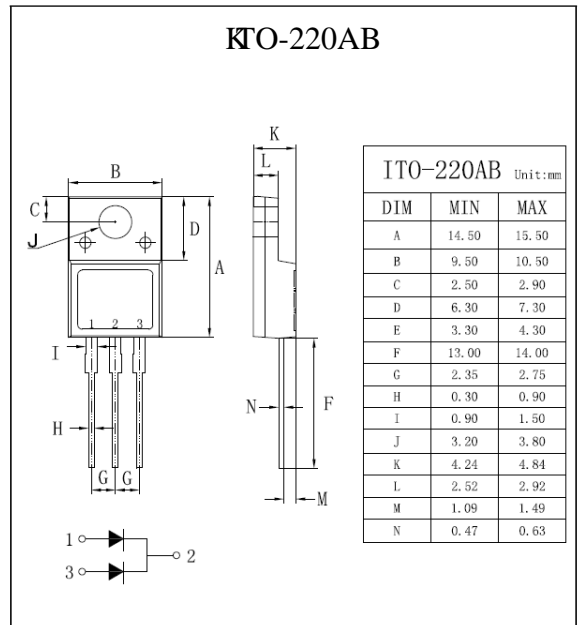
VOLTAGE	100 to 600 Volts
CURRENT	20 Amperes

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0. Flame Retardant Epoxy Molding Compound.
- Low power loss, high efficiency.
- Low forward voltage, high current capability.
- High surge capability
- Ultra fast recovery time, high voltage.
- Lead free in comply with EU RoHS.

### MECHANICAL DATA

- Case: ITO-220AB molded plastic
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

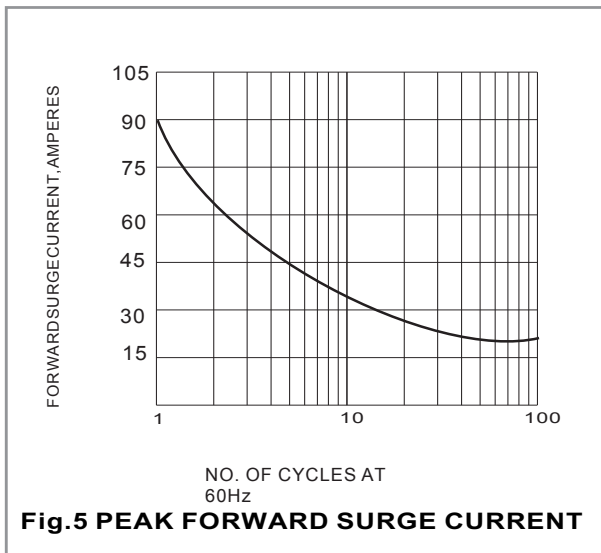
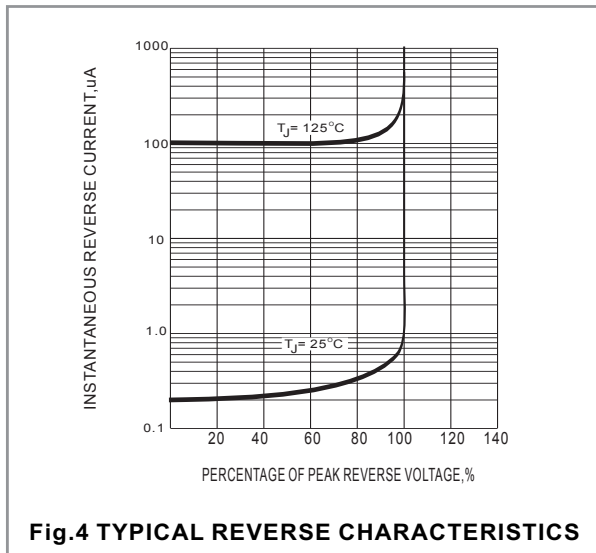
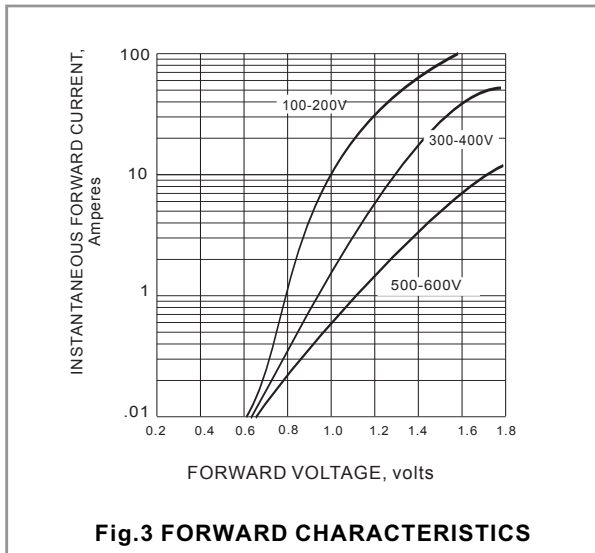
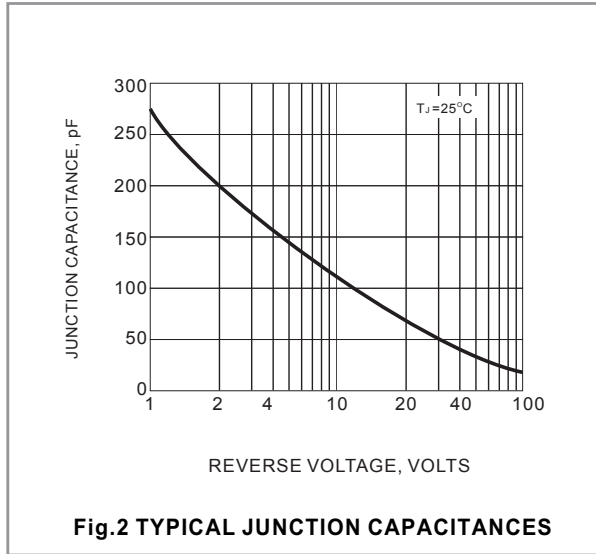
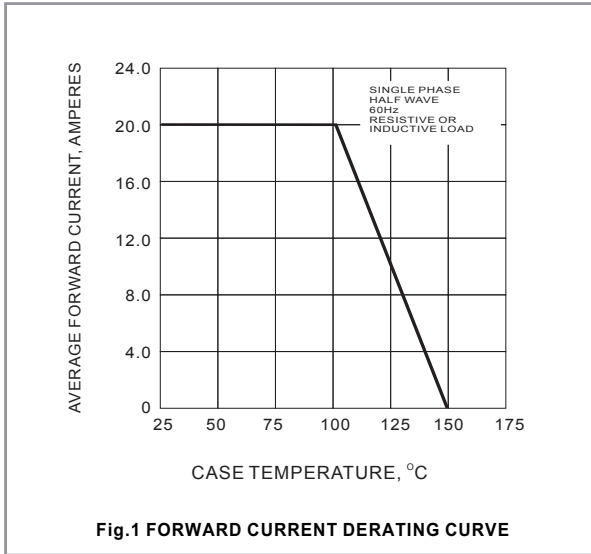
For capacitive load, derate current by 20%

PARAMETER	SYMBOL	SFF2010CT	SFF2020CT	SFF2030CT	SFF2040CT	SFF2050CT	SFF2060CT	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	100	200	300	400	500	600	V
Maximum RMS Voltage	$V_{RMS}$	70	140	210	280	350	420	V
Maximum DC Blocking Voltage	$V_{DC}$	100	200	300	400	500	600	V
Maximum Average Forward Current at $T_c = 100^\circ\text{C}$	$I_{F(AV)}$	20						A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	90						A
Maximum Forward Voltage at 10A	$V_F$	1	1.3		1.7			V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_j=25^\circ\text{C}$ $T_j=125^\circ\text{C}$	$I_R$	10 500						$\mu\text{A}$
Typical Junction Capacitance (Note 1)	$C_j$	200						pF
Maximum Reverse Recovery Time (Note 2)	$t_{rr}$	35						ns
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$	3						$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	$T_j, T_{STG}$	-55 to +150						$^\circ\text{C}$

#### NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
2. Reverse Recovery Test Conditions:  $I_F=0.5\text{A}$ ,  $I_R=1\text{A}$ ,  $I_{rr}=0.25\text{A}$ .
3. Thermal resistance from Junction to case.

## RATING AND CHARACTERISTIC CURVES



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