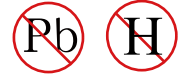




SUPER FAST RECOVERY RECTIFIER
 VOLTAGE- 600 Volts CURRENT - 30 Ampere

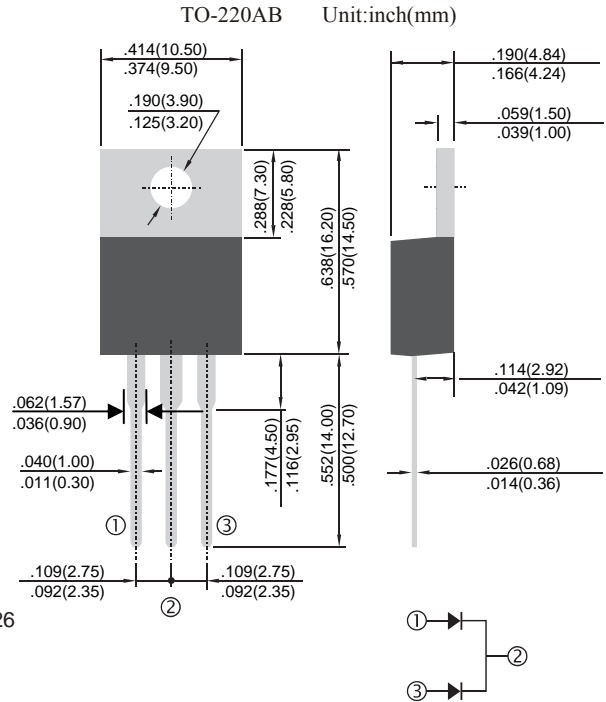


FEATURES

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



MAXIMUM RATINGS ANDELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER		SYMBOL	SF3060CT			UNIT	
Device marking code		Note	SF3060CT			---	
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	600			V	
Average Rectified Output Current		I_F	30			A	
Peak Forward Surge Current 8.3ms single half sine-wave		I_{FSM}	190			A	
Storage temperature range		T_{STG}	-55 to +150			°C	
Operating junction temperature range		T_J	-55 to +150			°C	
PARAMETER	TEST CONDITIONS		SYMBOL	Min.	Typ.	Max.	UNIT
Breakdown voltage	$I_R=50\mu A$	$T_J=25^\circ C$	V_B	600	---	---	V
Forward Voltage	$I_F=15A$	$T_J=25^\circ C$	V_F	---	1.40	1.80	V
		$T_J=125^\circ C$		---	1.20	1.60	
Leakage Current	$V_R=600V$	$T_J=25^\circ C$	I_R	---	---	50	μA
		$T_J=125^\circ C$		---	---	500	
Reverse recovery time	$I_F=0.5A$ $I_{rr}=0.25A$ $I_R=1.0A$	$T_J=25^\circ C$	t_{rr}	---	27	35	ns
THERMAL CHARACTERISTIC			SYMBOL	Typical			UNIT
Typical thermal resistance_Junction to Case			$R_{\theta JC}$	4.5			°C/W
Typical thermal resistance_Junction to Lead			$R_{\theta JL}$	5.5			°C/W
Junction Capaitance (Note 1)			C_j	120			pF

Notes: 1.Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc

DEVICE CHARACTERISTICS

SF3060CT

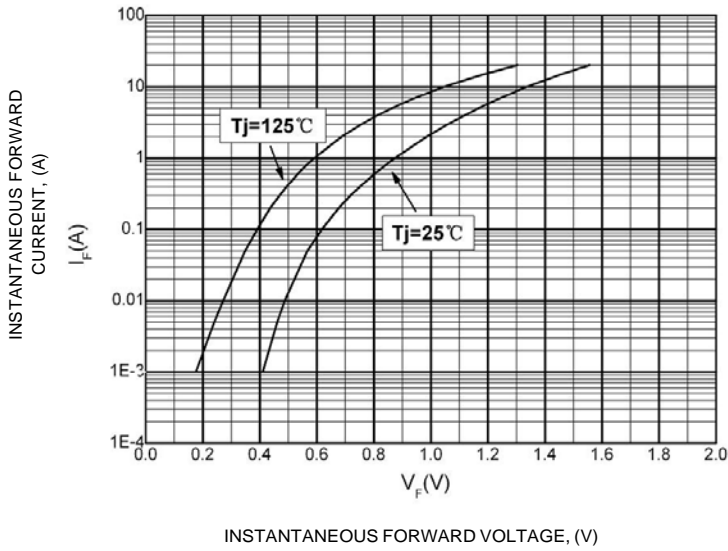


Fig. 1-TYPICAL FORWARD CHARACTERISTICS

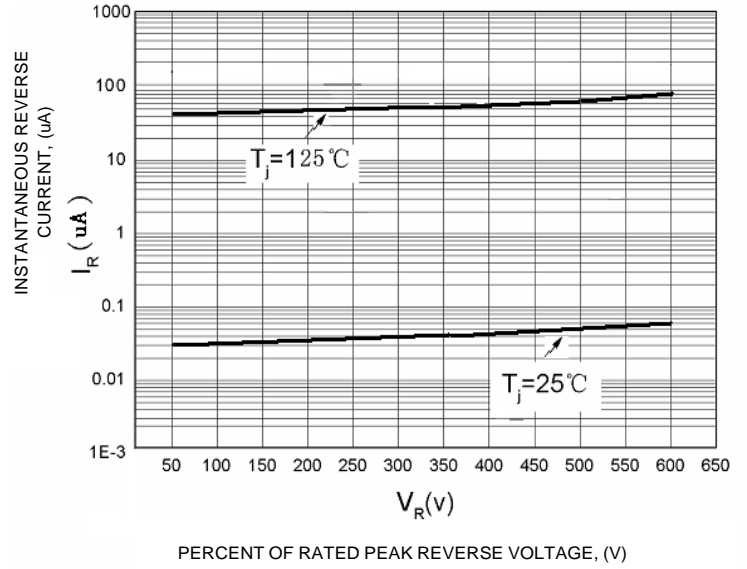


Fig. 2-TYPICAL REVERSE CHARACTERISTICS

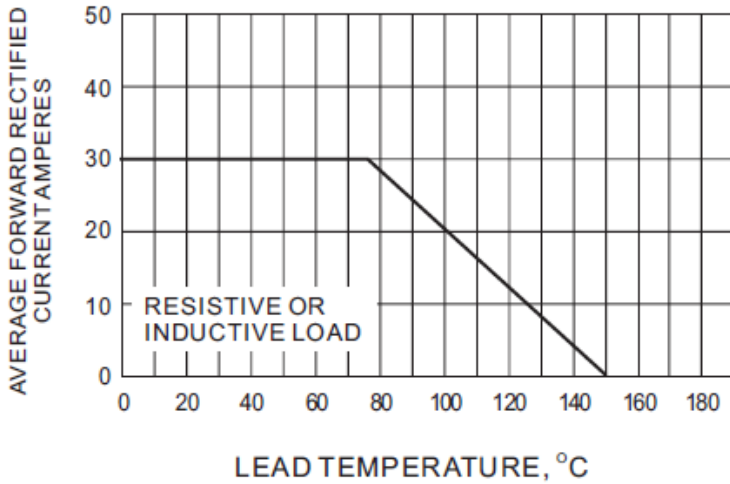


Fig. 3-FORWARD CURRENT DERATING CURVE