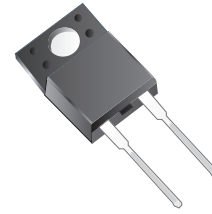


SF1005-G Thru. SF1060-G

Reverse Voltage: 50 to 600 Volts
Forward Current: 10 Amp
RoHS Device

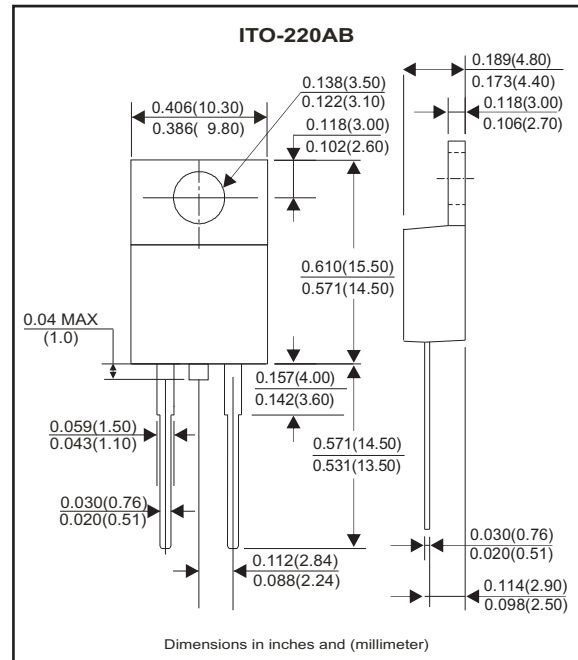


Features

- Low power loss,high efficiency.
- Low power voltage,high current capability.
- High surge capacity.
- Super fast recouery time, high voltage.
- In compliance with EU RoHS 2002/95/EC directives.
- Exceeds environmental standards of MIL-S-19500/228

Mechanical data

- Epoxy: UL 94-V0 rated flame retardant.
- Case: ITO-220AC molded plastic.
- Terminals: Lead solderable per MIL-STD-750, method 2026.
- Polarity: As marked
- Weight: 1.56 grams approx.
- Standard packaging: Any



Maximun Ratings and Electrical Characteristics (at TA=25°C unless otherwise noted)

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Parameter	Symbol	SF 1005-G	SF 1010-G	SF 1020-G	SF 1030-G	SF 1040-G	SF 1050-G	SF 1060-G	Unit
Maximum Reverse Peak Repetitive Voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS Bridge Input 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 Rectified Current @Tc=75°C	$I_{(AV)}$	10							A
Peak Forward Surge Current , 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC METHOD)	I_{FSM}	150							A
Maximum Peak Forward Voltage at 10.0A , per element	V_F	0.95			1.30		1.70		V
Maximum DC Reverse Current @Tj=25°C At Rate DC Blodking voltage @Tj=100°C	I_R	1			500				µA
Max. Reverse recovery time (Note 2)	T_{rr}	25			35				nS
Typical Junction capacitance (Note 1)	C_J	62							pF
Typical Thermal Resistance	$R_{θJC}$	3							°C/W
Operating Temperature Range	T_J	-55 to +150							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C

- Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0VDC.
 2. Reverse recovery test conditions: $I_F=0.5A$, $I_R=1A$, $I_{RR}=0.25A$
 3. Both bonding and chip structure available.

Rating and Characteristic Curves (EF1005-G Thru. EF1060-G)

Fig.1- Typical Forward Current Derating Curve

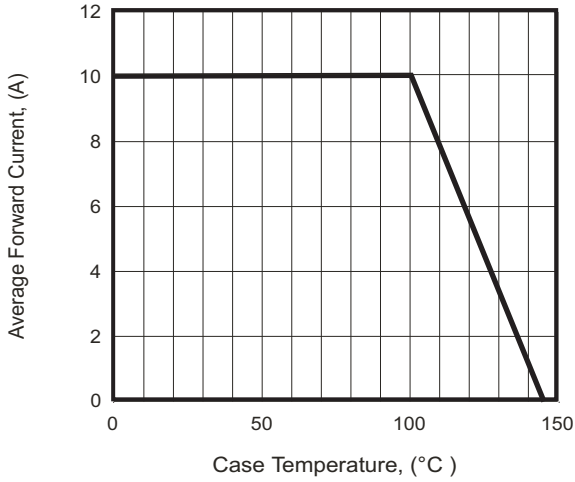


Fig.2- Maximum Non-Repetitive Forward Surge Current

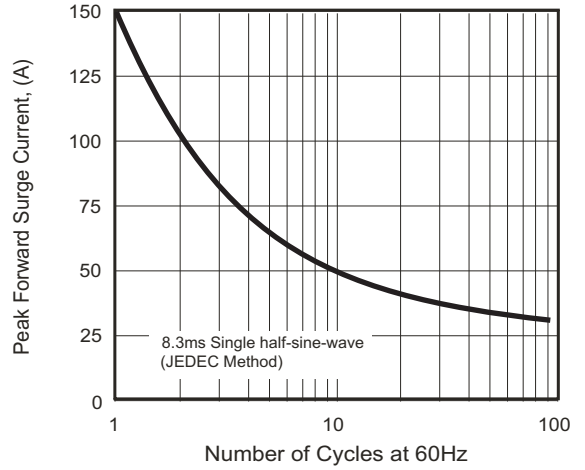


Fig.3- Typical Reverse Characteristics

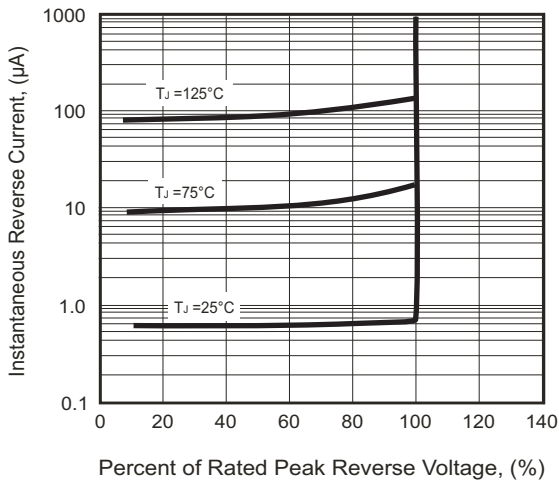


Fig.4- Typical Instantaneous Forward Characteristics

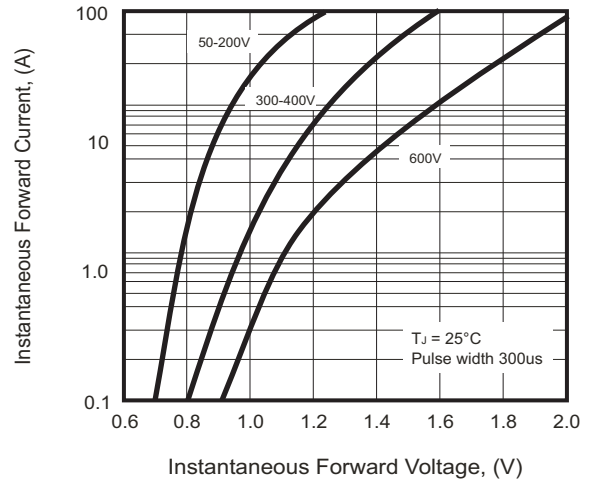
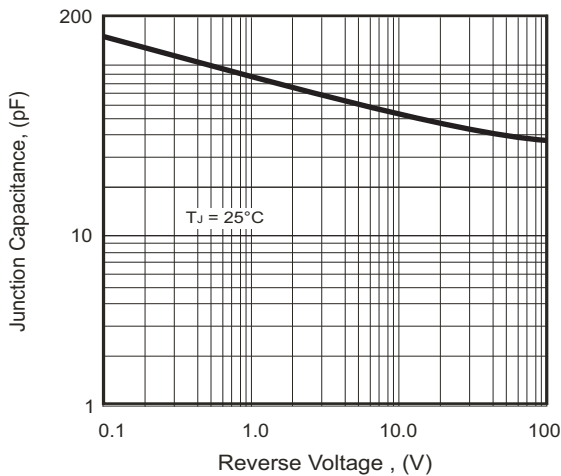
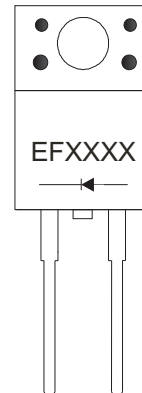


Fig.5- Typical Junction Capacitance



Marking Code

Part Number	Marking code
SF1005-G	EF1005
SF1010-G	EF1010
SF1020-G	EF1020
SF1030-G	EF1030
SF1040-G	EF1040
SF1050-G	EF1050
SF1060-G	EF1060



XXXX = Product type marking code

Standard Packaging

Case Type	TUBE PACK		
	TUBE (EA)	BOX (EA)	CARTON (EA)
ITO-220AB	50	2,000	8,000