

RoHS Compliant Product  
A suffix of "-C" specifies halogen free

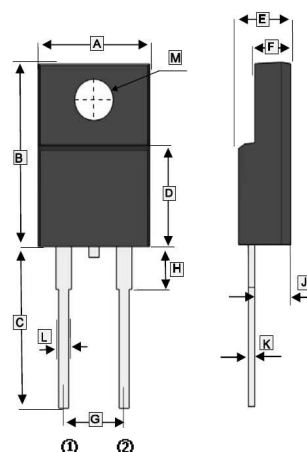
### FEATURES

- High Surge Capacity
- 150°C Operating Junction Temperature
- Low Power Loss, High Efficiency
- High-Switching Speed 50 Nanosecond Recovery Time
- Low Forward Voltage, High Current Capability
- Low Stored Charge Majority Carrier Conduction
- Plastic Material Used Carries Underwriters Laboratory Flammability Classification 94V-0

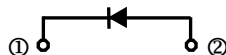
### ORDER INFORMATION

Part Number	Type
SF10H60F	Lead (Pb)-free
SF10H60F-C	Lead (Pb)-free and Halogen-free

ITO-220A



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	9.50	10.70	G	3.60	5.90
B	14.40	15.90	H	3.45	4.50
C	12.70	14.20	J	2.10	3.20
D	8.40TYP		K	0.40	0.80
E	4.20	5.10	L	0.30	0.90
F	2.50	3.56	M	φ2.60	φ3.80



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, de-rate current by 20%.)

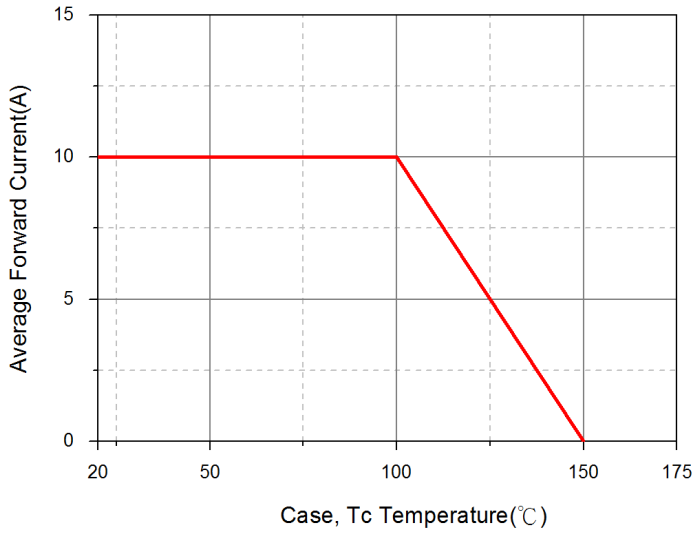
Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	600	V
Working Peak Reverse Voltage	$V_{RWM}$	600	V
DC Blocking Voltage	$V_R$	600	V
Average Rectifier Forward Current	$I_{F(AV)}$	10	A
Non-Repetitive Peak Surge Current @ Surge applied at rate load conditions half-wave, single phase, 60Hz	$I_{FSM}$	110	A
Max. Instantaneous Forward Voltage @ $I_F=10A$	$V_F$	1.35	V
Max. Instantaneous Reverse Current <sup>2</sup>	$T_J=25^\circ C$	5	$\mu A$
	$T_J=100^\circ C$	20	
Reverse Recovery Time <sup>3</sup>	$T_{RR}$	50	nS
Typical Junction Capacitance <sup>1</sup>	$C_J$	50	pF
Thermal Resistance	$R_{\theta JC}$	4	$^\circ C / W$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55~+150	$^\circ C$

Notes:

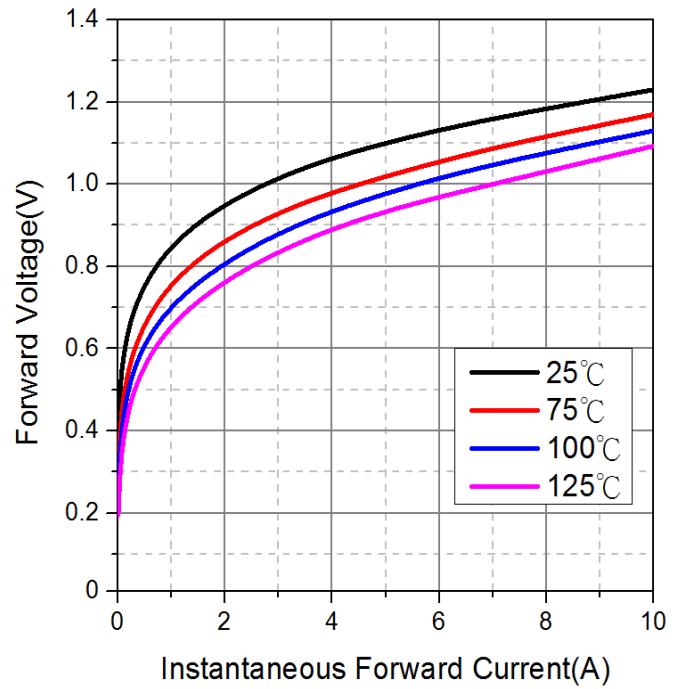
1. Measured at 1MHz and applied reverse voltage of 5V D.C.
2. Pulse Test: Pulse Width=300 $\mu s$ , Duty Cycle  $\leq 2\%$ .
3.  $I_F=0.5A, I_R=1A, I_{RR}=0.25A$ .

**RATINGS AND CHARACTERISTIC CURVES**

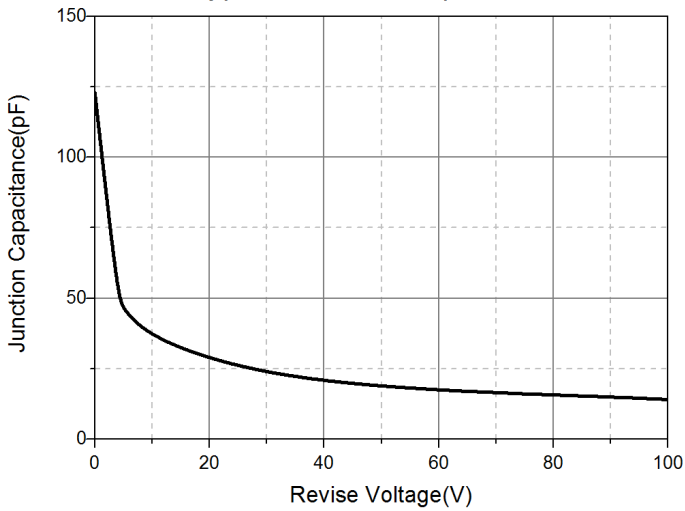
Typical Forward Current Derating Curve



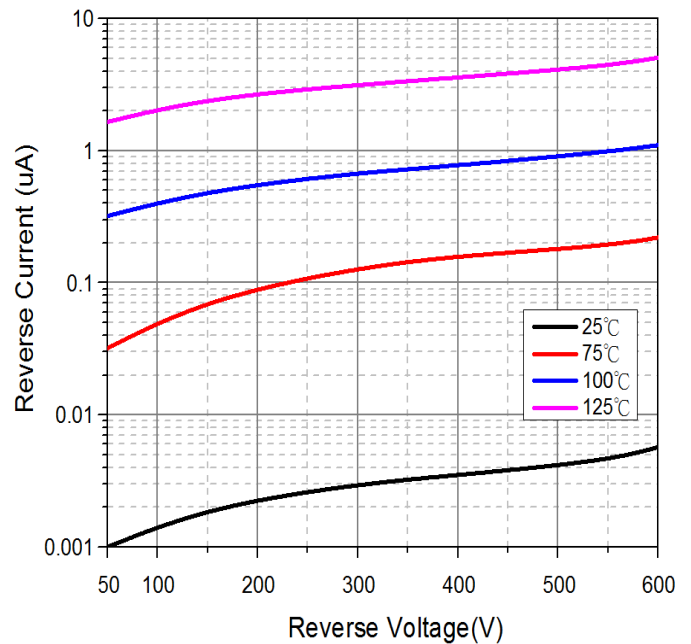
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current

