

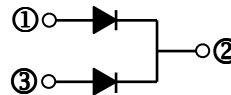
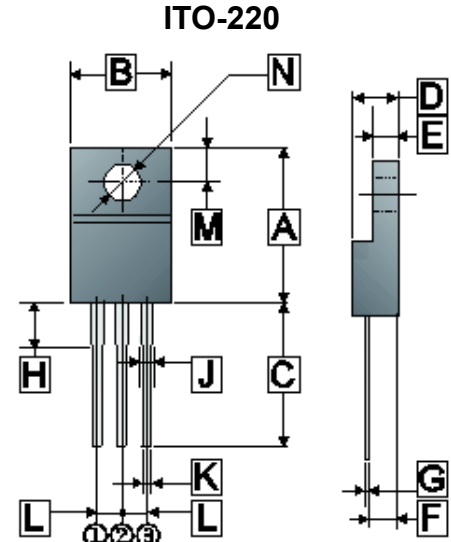
RoHS Compliant Product  
A suffix of "-C" specifies halogen free

### FEATURES

- Fast Switching for High Efficiency
- 150°C Operating Junction Temperature
- Low Power Loss, High Efficiency
- High-Switching Speed 25 Nanosecond Recovery Time
- Low Forward Voltage, High Current Capability
- Plastic Material Used Carries Underwriters Laboratory Flammability Classification 94V-0

### ORDER INFORMATION

Part Number	Type
SF16ED60F	Lead (Pb)-free
SF16ED60F-C	Lead (Pb)-free and Halogen-free



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.50	16.50	H	2.70	4.35
B	9.50	10.72	J	0.90	1.70
C	12.60	14.22	K	0.30	0.95
D	4.20	5.10	L	2.34	2.75
E	2.30	3.30	M	2.40	3.60
F	2.30	3.10	N	φ 3.0	φ 3.8
G	0.30	0.75			

### 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%.)

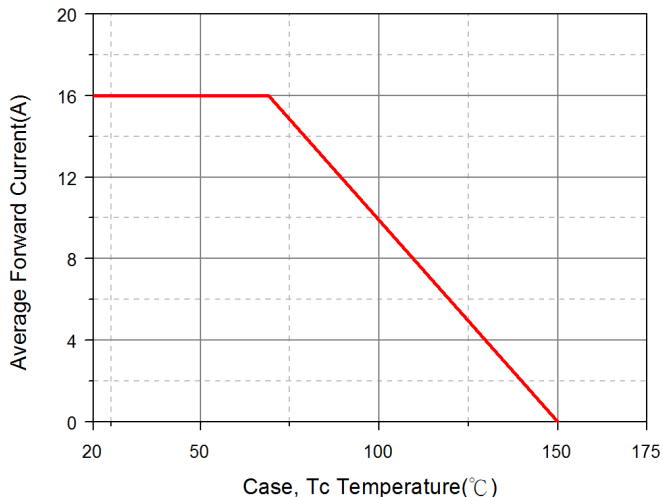
Parameter		Symbol	Rating	Unit
Peak Repetitive Reverse Voltage		$V_{RRM}$	600	V
Working Peak Reverse Voltage		$V_{RWM}$	600	V
DC Blocking Voltage		$V_R$	600	V
Average Rectifier Forward Current	Per Leg	$I_{F(AV)}$	8	A
	Per Device		16	
Non-Repetitive Peak Surge Current @ Surge applied at rate load conditions half-wave, single phase, 60Hz		$I_{FSM}$	70	A
Max. Instantaneous Forward Voltage @ $I_F=8A$	$T_A=25^\circ C$	$V_F$	2.3	V
	$T_A=125^\circ C$		2	
Max. Instantaneous Reverse Current <sup>2</sup>	$T_A=25^\circ C$	$I_R$	5	$\mu A$
	$T_A=125^\circ C$		20	
Reverse Recovery Time <sup>3</sup>		$T_{RR}$	25	nS
Typical Junction Capacitance <sup>1</sup>		$C_J$	20	pF
Thermal Resistance		$R_{\theta JC}$	4	°C / W
Operating Junction and Storage Temperature Range		$T_J, T_{STG}$	150, -55~150	°C

#### Notes:

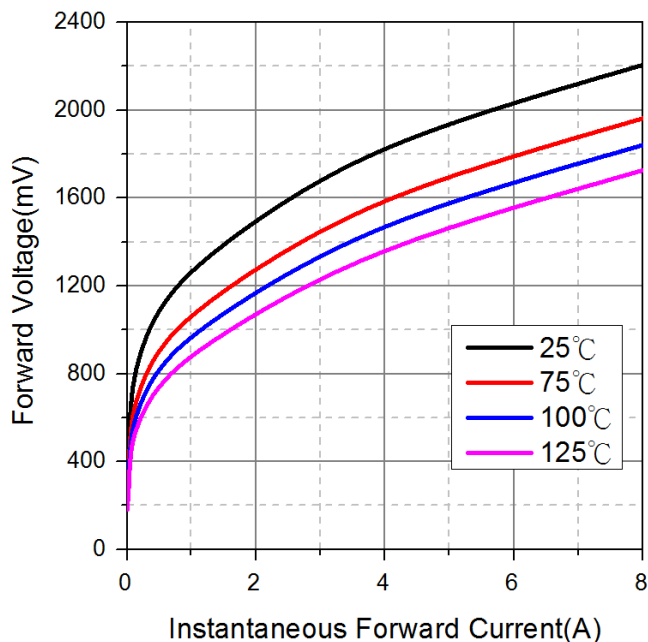
1. Measured at 1MHz and applied reverse voltage of 5V D.C.
2. Pulse Test: Pulse Width=300 $\mu s$ , Duty Cycle  $\leq 2\%$ .
3.  $I_F=0.5A$ ,  $I_R=1A$ ,  $I_{RR}=0.25A$ .

**RATINGS AND CHARACTERISTIC CURVES**

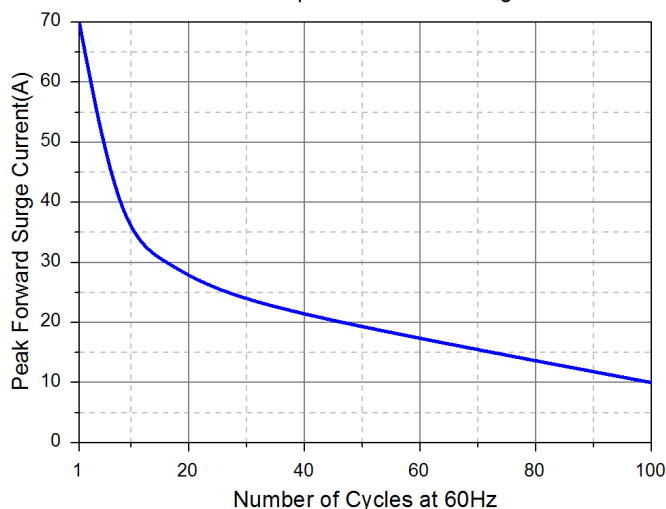
Typical Forward Current Derating Curve



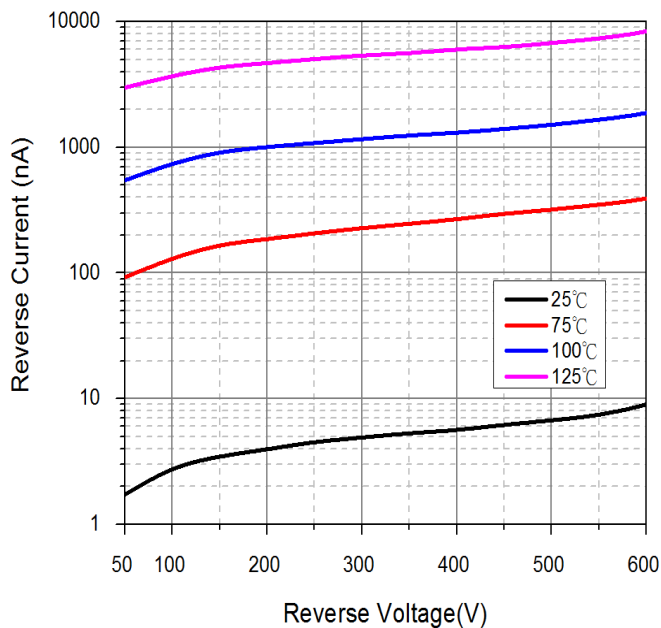
Typical Forward Characteristic



Maximum Non-Repetitive Forward Surge Current



Typical Reverse Characteristic



Typical Junction Capacitance

