

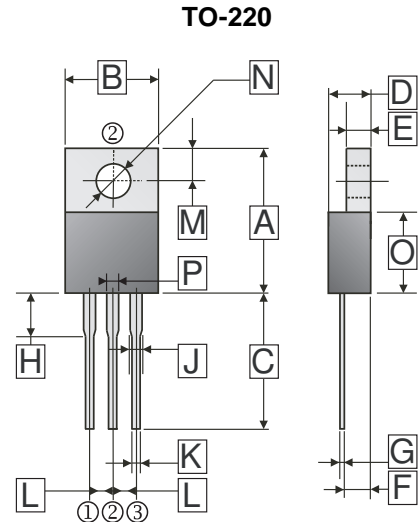
RoHS Compliant Product
A suffix of "-C" specifies halogen free

FEATURES

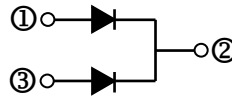
- High Surge Capacity
- 175°C Operating Junction Temperature
- Low Power Loss, High Efficiency
- High-Switching Speed 35 Nanosecond Recovery Time
- Low Forward Voltage, High Current Capability
- Low Stored Charge Majority Carrier Conduction
- Plastic Material Used Carries Underwriters Laboratory Flammability Classification 94V-0

ORDER INFORMATION

Part Number	Type
SF16TD60	Lead (Pb)-free
SF16TD60-C	Lead (Pb)-free and Halogen-free



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.22	16.51	J	0.70	1.78
B	9.57	10.90	K	0.38	1.11
C	12.50	14.75	L	2.01	3.07
D	3.56	5.10	M	2.22	3.43
E	0.51	1.47	N	3.10	4.31
F	2.03	3.19	O	8.10	9.65
G	0.279	0.76	P	1.18 Typ.	
H	2.95	4.5			



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%.)

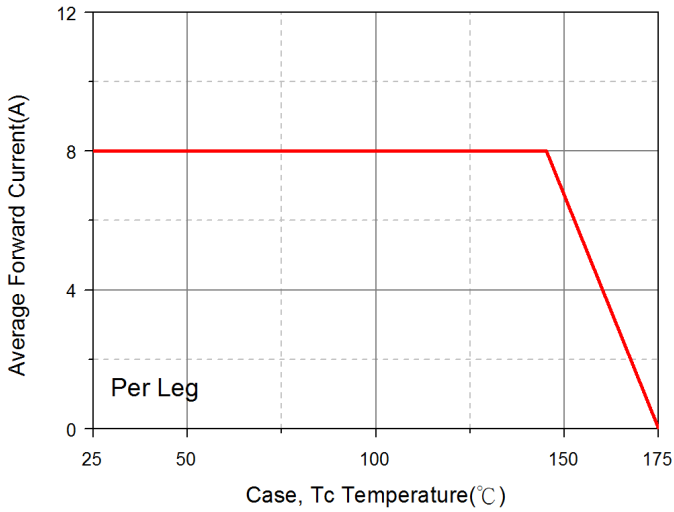
Characteristics		Symbol	Rating	Units
Peak Repetitive Reverse Voltage		V_{RRM}	600	V
Working Peak Reverse Voltage		V_{RWM}	600	V
DC Blocking Voltage		V_R	600	V
Average Rectifier Forward Current	Per Leg	$I_{F(AV)}$	8	A
	Per Device		16	A
Non-Repetitive Peak Surge Current@ Surge applied at rate load conditions half-wave, single phase, 60Hz		I_{FSM}	80	A
Max. Instantaneous Forward Voltage @ $I_F=8A$	$T_J=25^\circ C$	V_F	1.55	V
	$T_J=125^\circ C$		1.45	
Max. Instantaneous Reverse Current ¹	$T_J=25^\circ C$	I_R	5	uA
	$T_J=125^\circ C$		500	
Reverse Recovery Time ²		T_{RR}	35	nS
Typical Junction Capacitance ³		C_J	27	pF
Typical Thermal Resistance		$R_{\theta JC}$	2	°C / W
Operating Junction and Storage Temperature Range		T_J, T_{STG}	175, -55~150	°C

Notes:

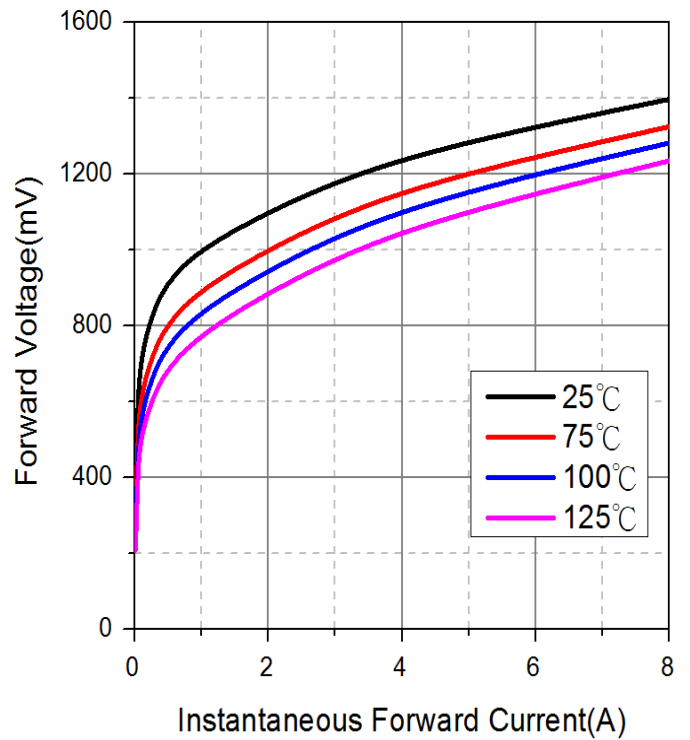
1. Pulse Test: Pulse Width=300µs, Duty Cycle≤2%.
2. $I_F=0.5A$, $I_R=1A$, $IRR=0.25A$.
3. Measured at 1MHz and applied reverse voltage of 5V D.C.

RATINGS AND CHARACTERISTIC CURVES

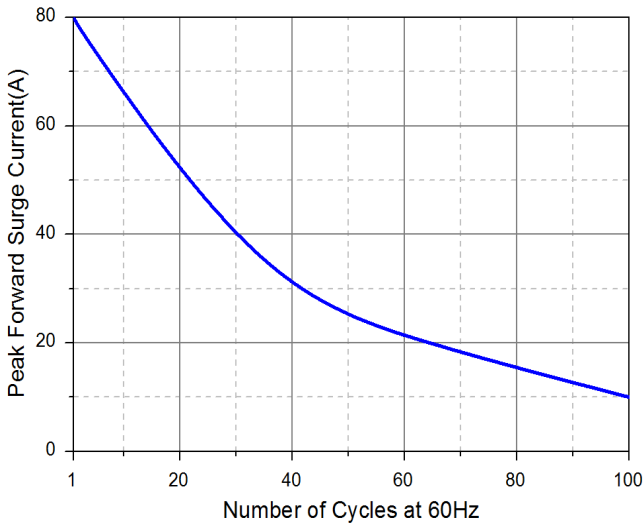
Typical Forward Current Derating Curve



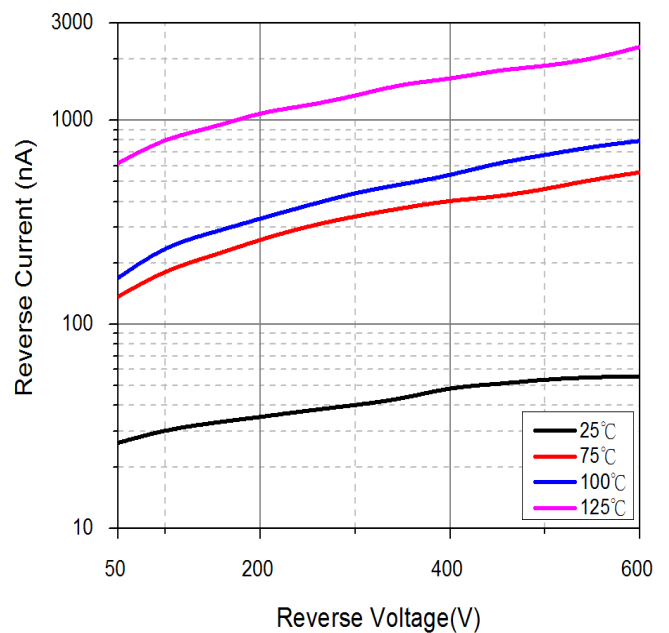
Typical Forward Characteristic



Maximum Non-Repetitive Forward Surge Current



Typical Reverse Characteristic



Typical Junction Capacitance

