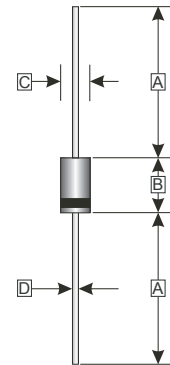


RoHS Compliant Product  
 A suffix of "-C" specifies halogen free

**DO-27(DO-201)**

**FEATURES**

- High Surge Capacity
- 175°C Operating Junction Temperature
- Low Power Loss, High Efficiency
- High-Switching Speed 70 Nanosecond Recovery Time
- Low Forward Voltage, High Current Capability
- Low Stored Charge Majority Carrier Conduction
- Plastic Material Used Carries Underwriters Laboratory Flammability Classification 94V-O



**PACKAGING INFORMATION**

- Case: Epoxy Molded
- Weight: 1.2 grams
- Polarity: Cathode indicated by polarity band.

REF.	Millimeter	
	Min.	Max.
A	25.4 (TYP)	
B	7.20	9.53
C	5.00	5.60
D	1.20	1.32

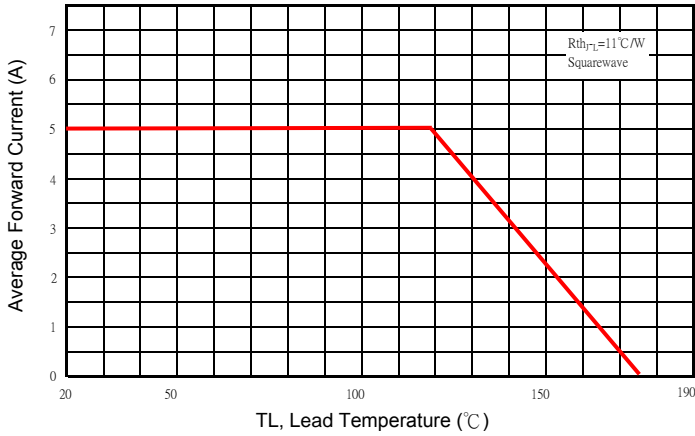
**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

CHARACTERISTICS	SYMBOL	RATING	UNIT	
Peak Repetitive Reverse Voltage	$V_{RRM}$	600	V	
Working Peak Reverse Voltage	$V_{RWM}$		V	
DC Blocking Voltage	$V_R$	600	V	
Average Rectifier Forward Current	$I_{F(AV)}$	5	A	
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions half-wave, single phase, 60Hz)	$I_{FSM}$	130	A	
Max. Instantaneous Forward Voltage ( $I_F = 5 A, T_C = 25^\circ C$ )	$V_F$	1.4	V	
Typical Forward Voltage ( $I_F = 5 A, T_C = 125^\circ C$ )		1.1		
Max. Instantaneous Reverse Current (Rated DC Voltage, $T_C = 25^\circ C$ )	$I_R$	10	$\mu A$	
(Rated DC Voltage, $T_C = 125^\circ C$ )		250		
Max. Reverse Recovery Time ( $I_F = 0.5A, V_R = 30V, di_F / dt = 100 A / \mu s$ )	$T_{RR}$	70	nS	
Typical Reverse Recovery Time ( $I_F = 0.5A, V_R = 30V, di_F / dt = 100 A / \mu s$ )		50		
Typical Junction Capacitance (Reverse Voltage of 0V & $f = 1MHz$ )	$C_P^2$	80	pF	
Thermal Resistance ( Note 1,2)	Junction to Ambient	$R_{\theta JA}$	30	$^\circ C / W$
	Junction to Lead	$R_{\theta JL}$	11	$^\circ C / W$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-65~+175	$^\circ C$	

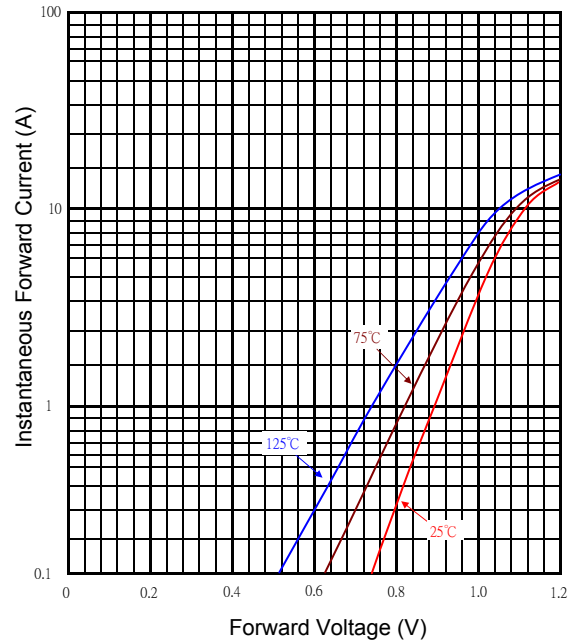
- Note:** 1. Thermal resistance junction to lead, measured point from body 1mm by lead.  
 2.. Lead length=1/2" on P.C board with 1.5" x 1.5" copper surface

**RATINGS AND CHARACTERISTIC CURVES (SF05U60E)**

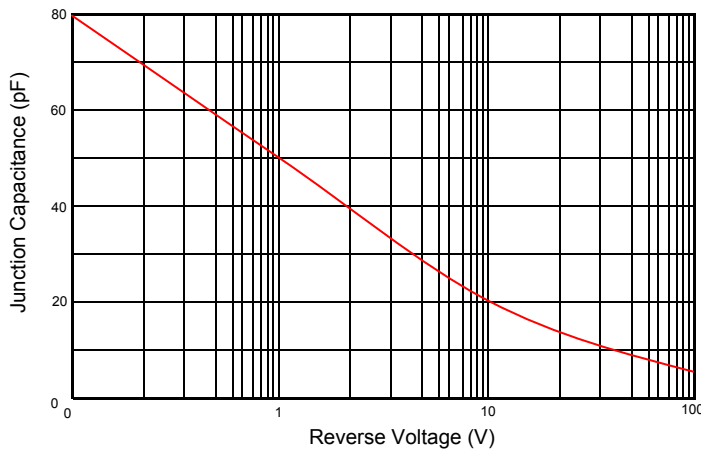
Typical Forward Current Derating Curve



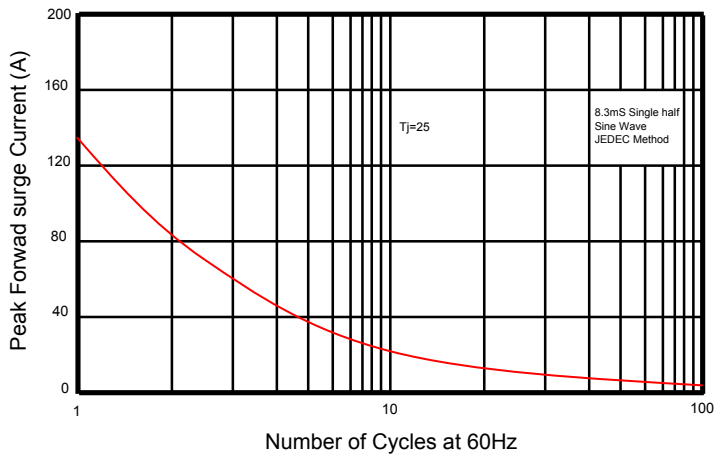
Typical Forward Characteristic



Typical Junction Capacitance



Maximum Non- Repetitive Forward Surge Current



Typical Reverse Characteristic

