

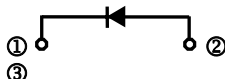
RoHS Compliant Product
A suffix of "-C" specifies halogen free

FEATURES

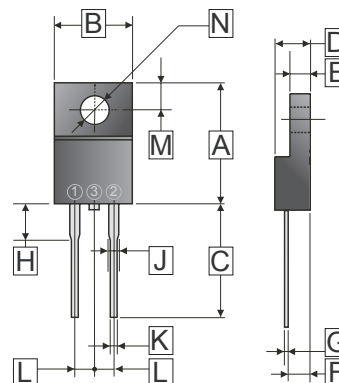
- High Surge Capacity
- 150°C Operating Junction Temperature
- Low Power Loss, High Efficiency
- High-Switching Speed 50 Nanosecond Recovery Time
- Low Forward Voltage, High Current Capability
- Low Stored Charge Majority Carrier Conduction
- Plastic Material Used Carries Underwriters Laboratory Flammability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

PACKAGING INFORMATION

Weight: 1.64 grams (approximate)



ITO-220A



Dimensions in millimeters

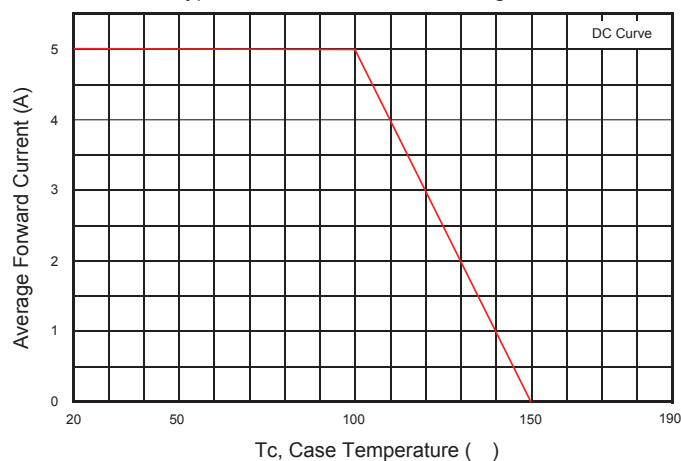
REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.70	15.30	H	3.50	3.90
B	9.50	10.50	J	1.10	1.50
C	13.00 Min		K	0.50	0.90
D	4.30	4.70	L	2.44	2.64
E	2.50	3.10	M	2.50	2.90
F	2.40	2.80	N	ø 3.1	ø 3.4
G	0.30	0.70			

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

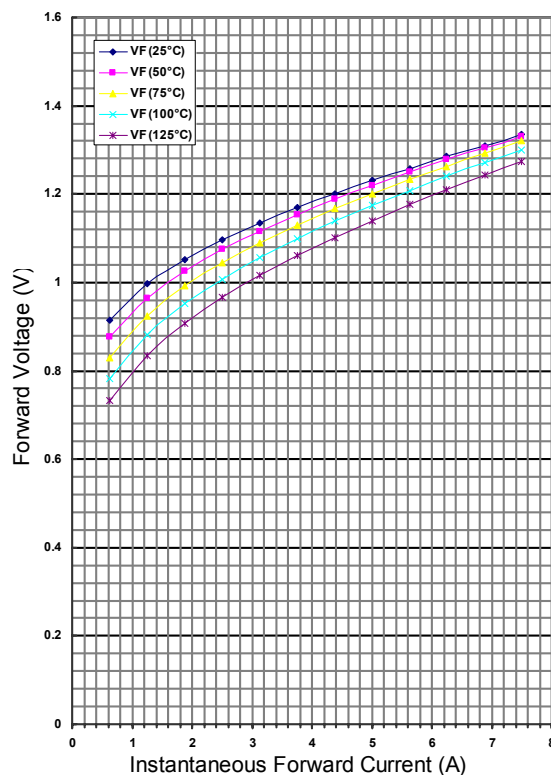
CHARACTERISTICS	SYMBOL	SF05U60F	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	600	V
Working Peak Reverse Voltage	V_{RWM}		V
DC Blocking Voltage	V_R	480	V
Average Rectifier Forward Current	$I_{F(AV)}$	5	A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions half-wave, single phase, 60Hz)	I_{FSM}	60	A
Max. Instantaneous Forward Voltage ($I_F = 5\text{ A}$, $T_C = 25^\circ\text{C}$)	V_F	1.5	V
Typical Forward Voltage ($I_F = 5\text{ A}$, $T_C = 25^\circ\text{C}$)		1.2	
Max. Instantaneous Reverse Current (Rated DC Voltage, $T_C = 25^\circ\text{C}$)	I_R	10	μA
(Rated DC Voltage, $T_C = 125^\circ\text{C}$)		500	
Max. Reverse Recovery Time ($I_F = 0.5\text{ A}$, $V_R = 30\text{ V}$, $dI_F / dt = 100\text{ A} / \mu\text{s}$)	T_{RR}	70	nS
Typical Reverse Recovery Time ($I_F = 0.5\text{ A}$, $V_R = 30\text{ V}$, $dI_F / dt = 100\text{ A} / \mu\text{s}$)		50	
Typical Junction Capacitance (Reverse Voltage of 0V & $f = 1\text{ MHz}$)	C_P	70	pF
Thermal Resistance	$R_{\theta JC}$	4.0	$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-65~+150	$^\circ\text{C}$

RATINGS AND CHARACTERISTIC CURVES (SF05U60F)

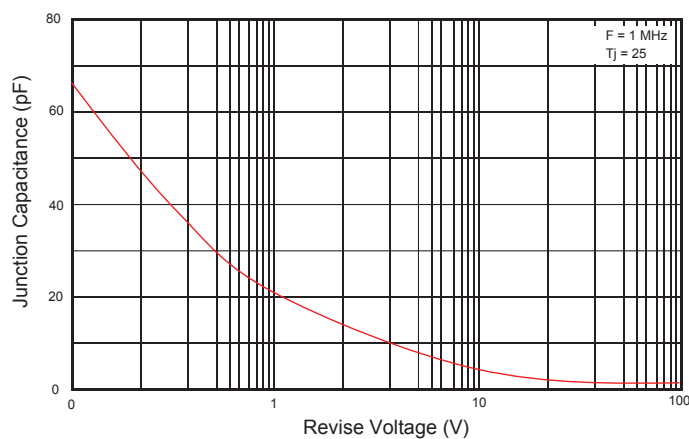
Typical Forward Current Derating Curve



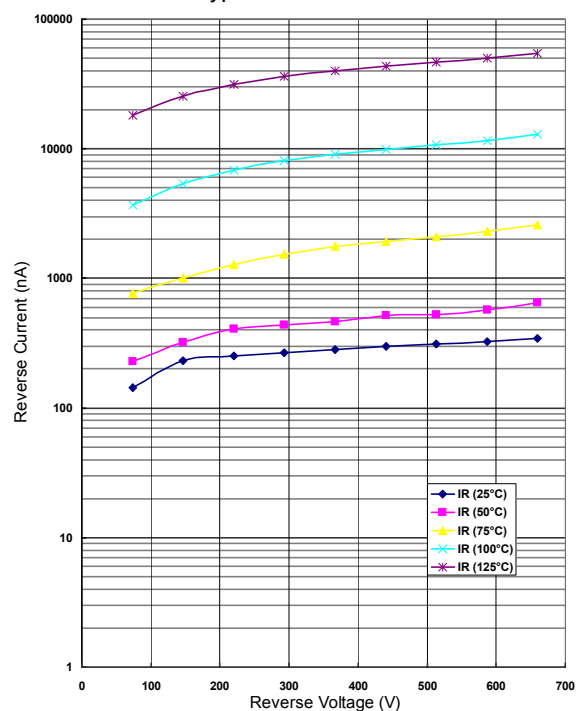
Typical Forward Characteristic



Typical Junction Capacitance



Typic Reverse Curve



Maximum Non- Repetitive Forward Surge Current

