5

Elektronische Bauelemente

SF05S60F

Voltage 600 V

5 Amp Low Loss Superfast Rectifier

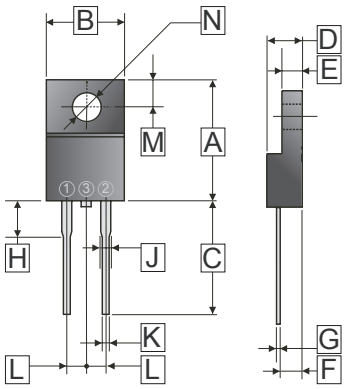
RoHS Compliant Product

A suffix of "-C" specifies halogen free

FEATURES

- High Surge Capacity
- 150°C Operating Junction Temperature
- Low Power Loss, High Effciency
- High-Switching Speed 27 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

ITO-220A

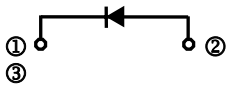


Dimensions in millimeters

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	ϕ3.1	ϕ3.4
G	0.30	0.70			

PACKAGING INFORMATION

Weight: 1.64 grams (approximate)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	SF05S60F	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 A, T_C=25°C) Typical Forward Voltage (I_F= 5 A, T_C=25°C)	V_F	2.7 1.5	V
Max. Instantaneous Reverse Current (Rated DC Voltage, T_C=25°C) (Rated DC Voltage, T_C=125°C)	I_R	10 500	μA
Max. Reverse Recovery Time (I_F = 0.5A,V_R = 30V,dI_F / dt = 100 A / μs) Typical Reverse Recovery Time (I_F = 0.5A,V_R = 30V,dI_F / dt = 100 A / μs)	T_{RR}	38 27	nS
Typical Junction Capacitance (Reverse Voltage of 0V & f=1MHz)	C_P	70	pF
Thermal Resistance	$R_{\theta JC}$	4.0	°C / W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-65~+150	°C

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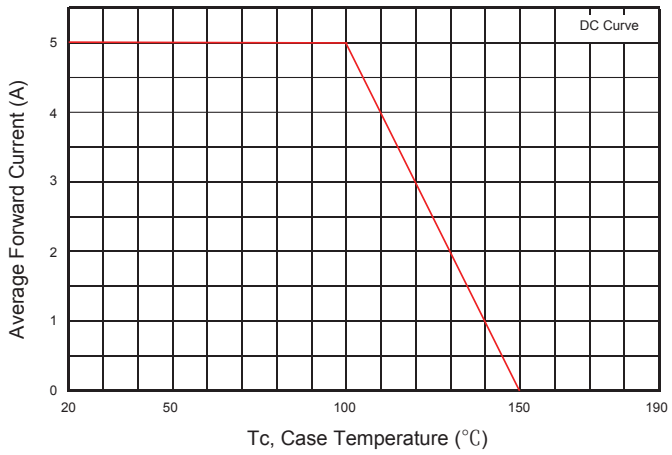
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Voltage 600 V

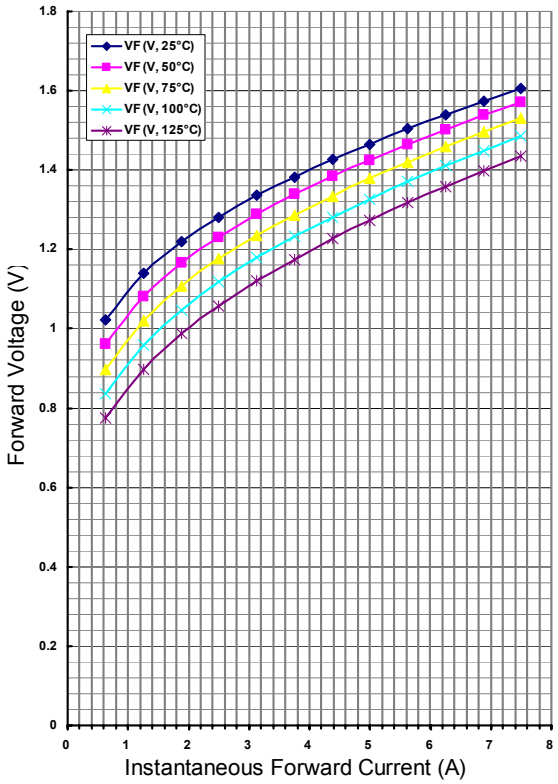
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RATINGS AND CHARACTERISTIC CURVES (SF05S60F)

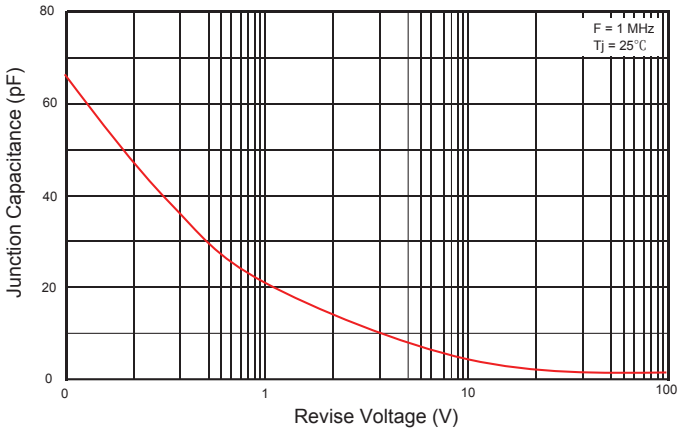
Typical Forward Current Derating Curve



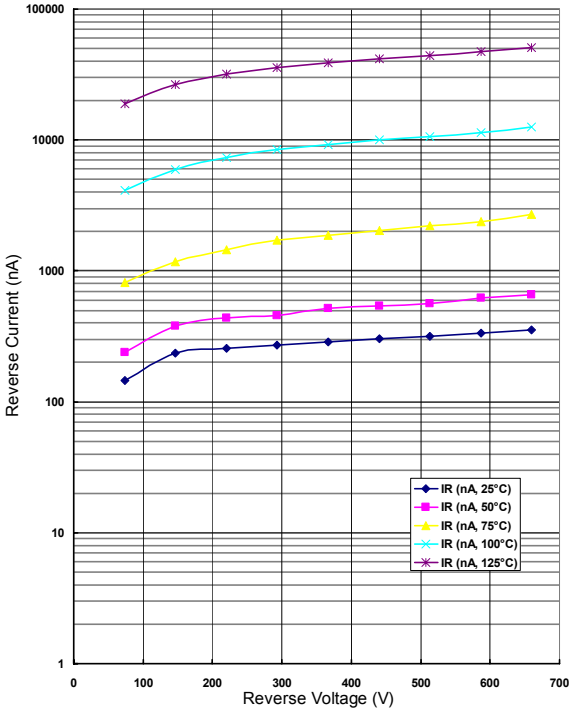
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Curve



Maximum Non- Repetitive Forward Surge Current

