Elektronische Bauelemente

SF10T60F

Voltage 600 V

10 Amp Super Fast Recovery Rectifier

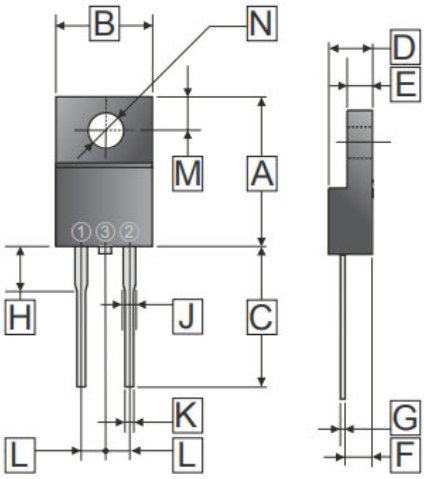
RoHS Compliant Product

A suffix of "-C" specifies halogen free

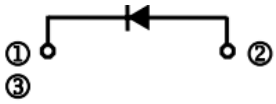
FEATURES

- 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

ITO-220A



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.40	15.90	H	3.45	5.30
B	9.50	10.70	J	1.6 TYP.	
C	12.40	14.30	K	0.30	0.90
D	4.20	5.10	L	2.54 TYP.	
E	2.50	3.65	M	2.15	3.25
F	2.10	3.20	N	ϕ 2.6	ϕ 3.56
G	0.30	0.80			



ORDER INFORMATION

Part Number	Type
SF10T60F	Lead (Pb)-free
SF10T60F-C	Lead (Pb)-free and Halogen-free

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		$I_{F(AV)}$	10	A
Non-Repetitive Peak Surge Current @ Surge applied at rate load conditions half-wave, single phase, 60Hz		I_{FSM}	110	A
Max. Instantaneous Forward Voltage @ I_F=10A	T_A=25°C	V_F	2.3	V
	T_A=125°C		2	
Max. Instantaneous Reverse Current [2]	T_A=25°C	I_R	5	μA
	T_A=125°C		20	
Reverse Recovery Time [3]		T_{RR}	25	nS
Typical Junction Capacitance [1]		C_J	32	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=300μs, Duty Cycle≦2%.
3. I_F=0.5A, I_R =1A, I_{RR}=0.25A.

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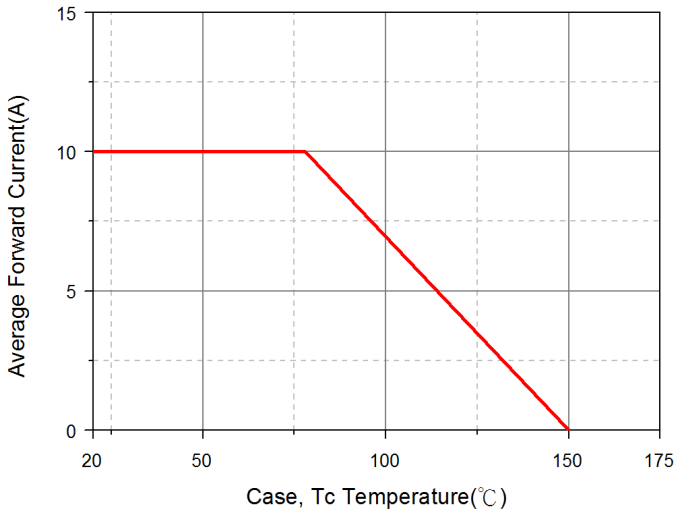
SF10T60F

Voltage 600 V

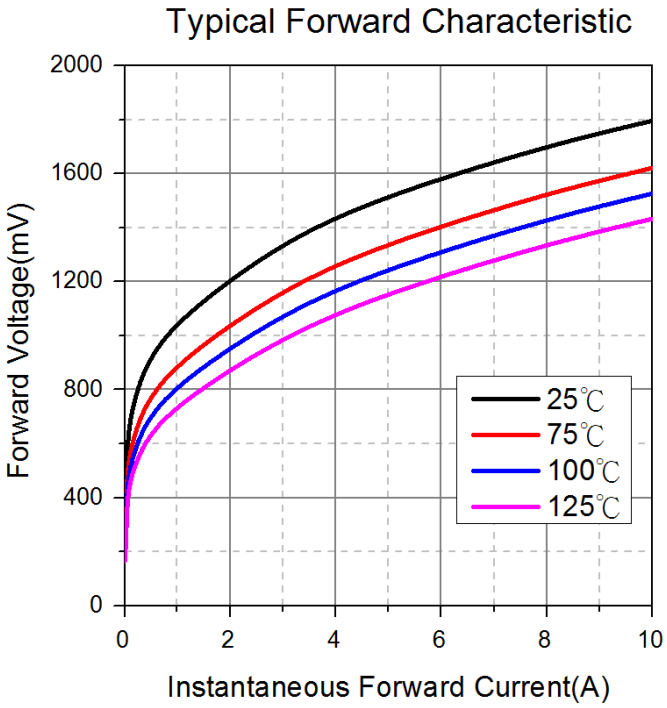
10 Amp Super Fast Recovery Rectifier

RATINGS AND CHARACTERISTIC CURVES

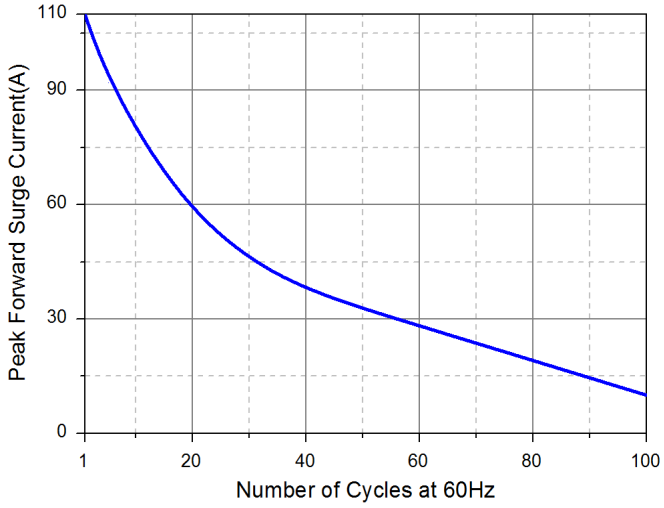
Typical Forward Current Derating Curve



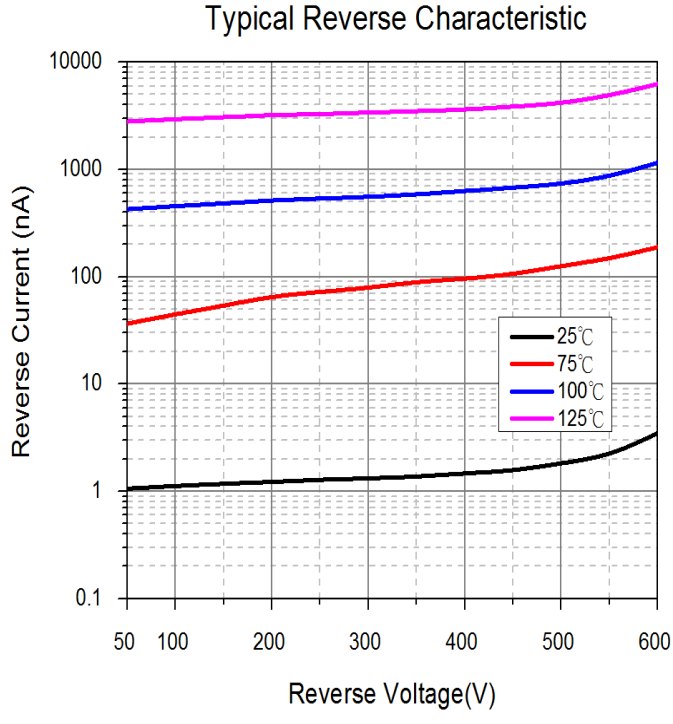
Typical Forward Characteristic



Maximum Non-Repetitive Forward Surge Current



Typical Reverse Characteristic



Typical Junction Capacitance

