

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 35 Nanosecond Recovery Time
- Low Forward Voltage, High Current Capability
- Plastic Material Used Carries Underwriters Laboratory Flammability Classification 94V-0

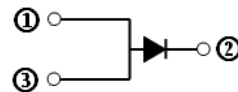
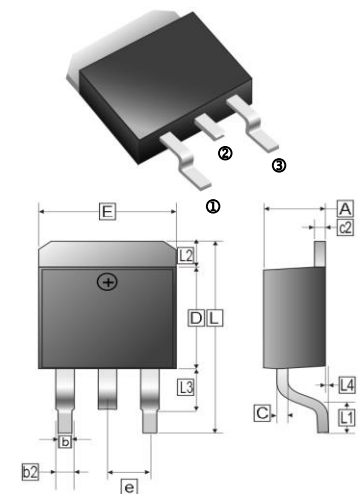
ORDER INFORMATION

Part Number	Type
SF10T60D	Lead (Pb)-free
SF10T60D-C	Lead (Pb)-free and Halogen-free

PACKAGE INFORMATION

Package	MPQ	Leader Size
TO-263	0.8K	13 inch

TO-263(D²-PAK)



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.00	4.87	c2	1.07	1.65
b	0.51	1.01	b2	1.34	REF
L4	0.00	0.30	D	8.0	9.65
C	0.30	0.74	e	2.54	REF
L3	1.50	REF	L	14.6	16.1
L1	2.5	REF	L2	1.27	REF
E	9.60	10.67			

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%.)

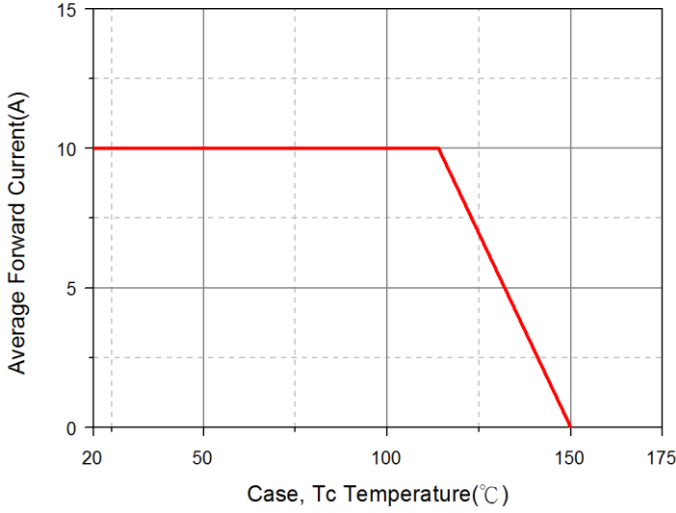
Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	600	V
Working Peak Reverse Voltage	V _{RWM}	600	V
DC Blocking Voltage	V _R	600	V
Average Rectifier Forward Current	I _{F(AV)}	10	A
Non-Repetitive Peak Surge Current @ Surge applied at rate load conditions half-wave, single phase, 60Hz	I _{FSM}	110	A
Max. Instantaneous Forward Voltage @ I _F =10A	V _F	T _A =25°C	1.55
		T _A =125°C	1.45
Max. Instantaneous Reverse Current ²	I _R	T _A =25°C	5
		T _A =125°C	20
Reverse Recovery Time ³	T _{RR}	35	nS
Typical Junction Capacitance ¹	C _J	45	pF
Thermal Resistance	R _{θJC}	2	°C / W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	150, -55~150	°C

Notes:

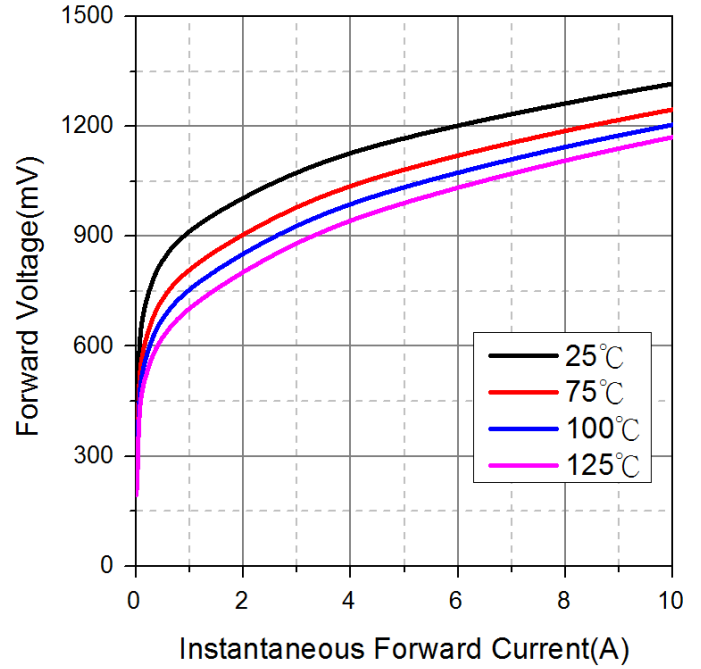
1. Measured at 1MHz and applied reverse voltage of 5V D.C.
2. Pulse Test: Pulse Width=300µs, Duty Cycle ≤2%.
3. I_F=0.5A, I_R =1A, I_{RR}=0.25A.

RATINGS AND CHARACTERISTIC CURVES

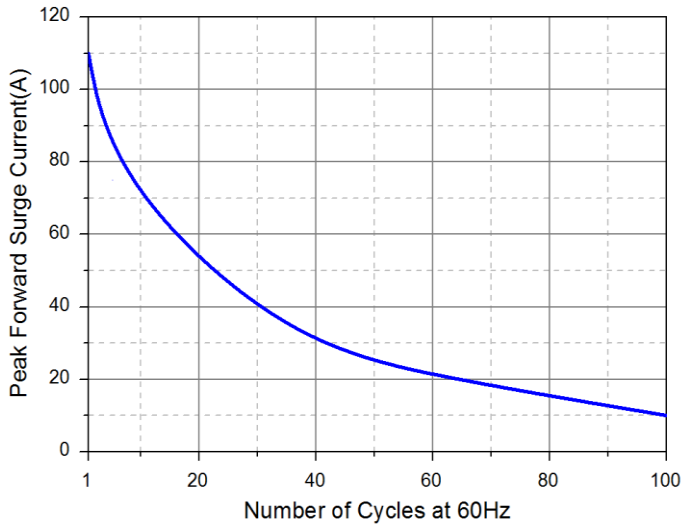
Typical Forward Current Derating Curve



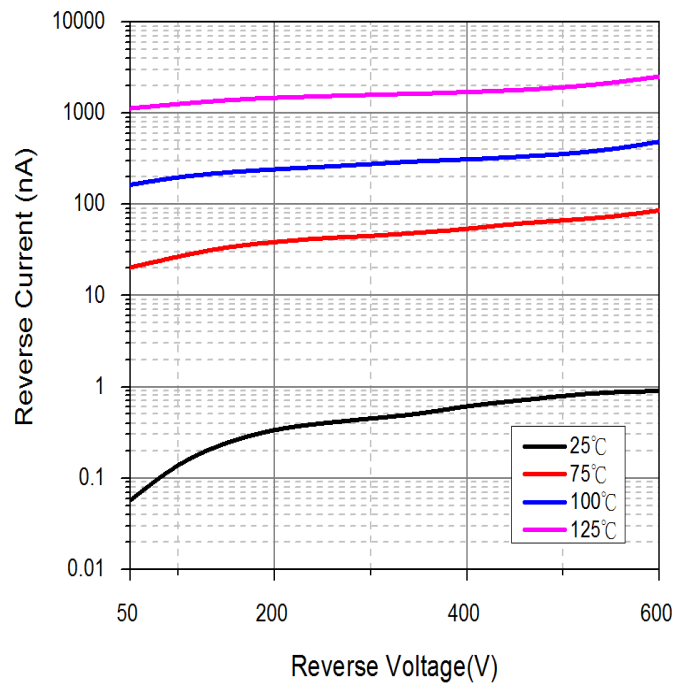
Typical Forward Characteristic



Maximum Non-Repetitive Forward Surge Current



Typical Reverse Characteristic



Typical Junction Capacitance

