Elektronische Bauelemente

SFL1660F

Voltage 600V

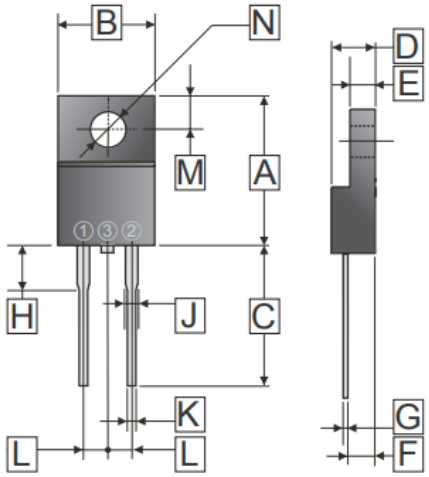
16.0 Amp Low Loss Ultrafast Rectifier

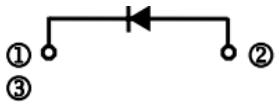
RoHS Compliant Product
A suffix of "-C" specifies halogen free

FEATURES

- Soft Reverse Recovery Diodes
- 150°C Operating Junction Temperature
- Fast Switching for High Efficiency
- 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	ϕ2.6	ϕ3.56
G	0.30	0.80			

ORDER INFORMATION

Part Number	Type
SFL1660F	Lead (Pb)-free
SFL1660F-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		$I_{F(AV)}$	16	A
Non-Repetitive Peak Surge Current @Surge applied at rate load conditions half-wave, single phase, 60Hz		I_{FSM}	120	A
Max. Instantaneous Forward Voltage @I_F=16A	T_A=25°C	V_F	1.35	V
	T_A=125°C		1.3	
Max. Instantaneous Reverse Current [2]	T_A=25°C	I_R	0.1	mA
	T_A=125°C		1	
Reverse Recovery Time [3]		T_{RR}	100	nS
Typical Junction Capacitance [1]		C_J	82	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 4V 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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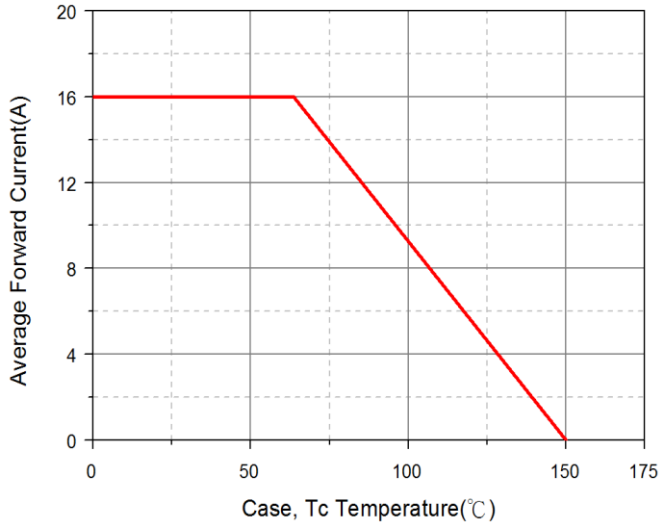
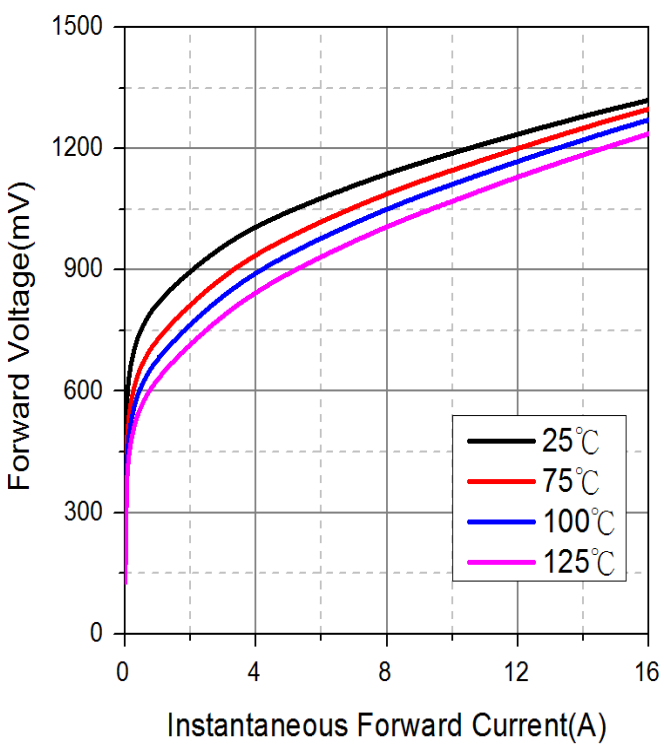
RATINGS AND CHARACTERISTIC CURVES

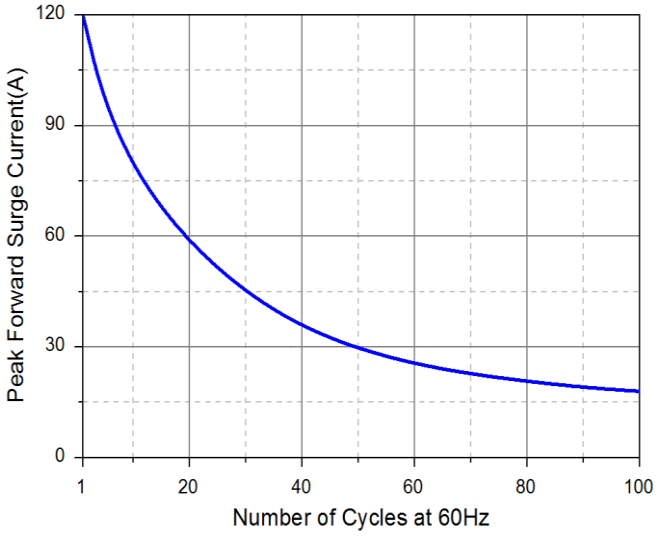
Typical Forward Current Derating Curve



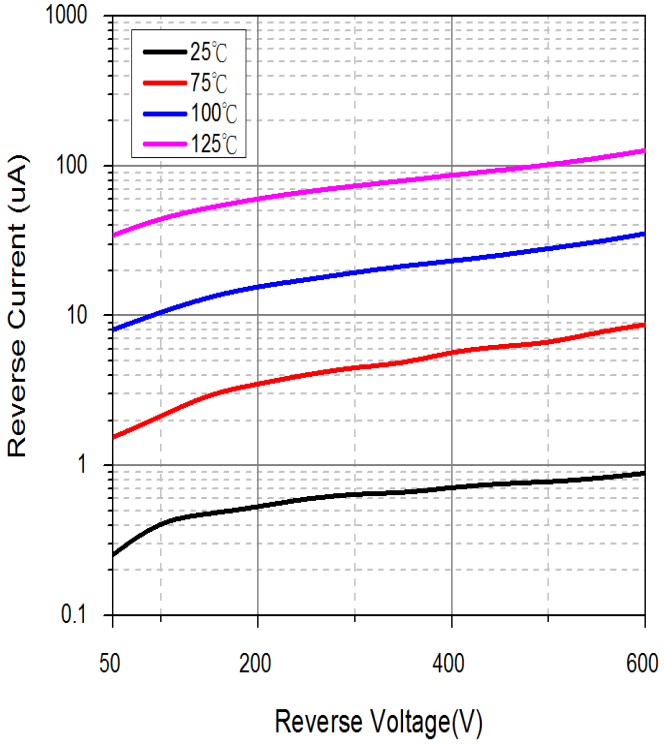
Typical Forward Characteristic



Maximum Non-Repetitive Forward Surge Current



Typical Reverse Characteristic



Typical Junction Capacitance