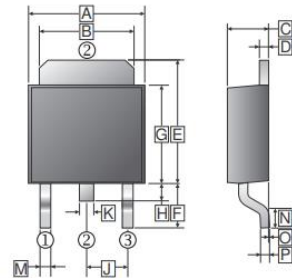
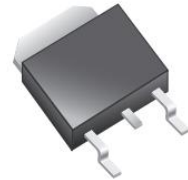


RoHS Compliant Product
A suffix of "-C" specifies halogen free

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

TO-252 (D-Pack)



PACKAGE INFORMATION

Package	MPQ	Leader Size
TO-252	2.5K	13 inch

ORDER INFORMATION

Part Number	Type
SFL1060DS1	Lead (Pb)-free
SFL1060DS1-C	Lead (Pb)-free and Halogen-free

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	6.30	6.90	J	2.30 REF.	
B	4.95	5.53	K	0.89 REF.	
C	2.10	2.50	M	0.45	1.14
D	0.40	0.90	N	1.55 TYP.	
E	6.00	7.70	O	0	0.15
F	2.90 REF.		P	0.58 REF.	
G	5.40	6.40			
H	0.60	1.20			



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%.)

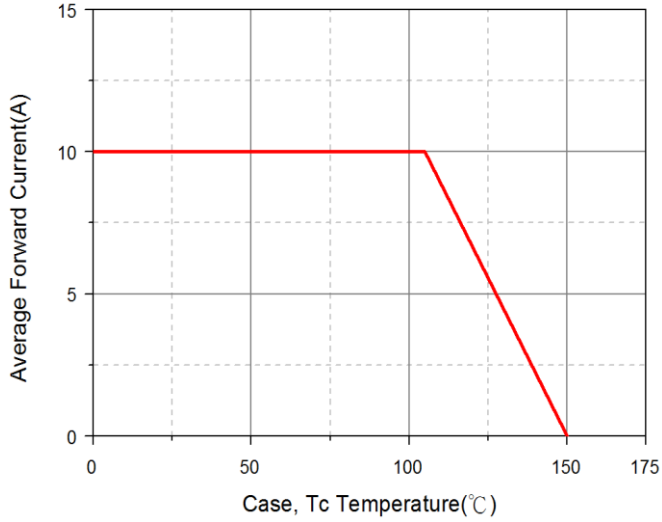
Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	600	V
Working Peak Reverse Voltage	V_{RWM}	600	V
DC Blocking Voltage	V_R	600	V
Average Rectifier Forward Current	$I_{F(AV)}$	10	A
Non-Repetitive Peak Surge Current @Surge applied at rate load conditions half-wave, single phase, 60Hz	I_{FSM}	100	A
Max. Instantaneous Forward Voltage @ $I_F=10A$	$T_A=25^\circ C$	1.35	V
	$T_A=125^\circ C$	1.25	
Max. Instantaneous Reverse Current ²	$T_A=25^\circ C$	0.1	mA
	$T_A=125^\circ C$	1	
Reverse Recovery Time ³	T_{RR}	100	nS
Typical Junction Capacitance ¹	C_J	33	pF
Thermal Resistance from Junction to Case ⁴	$R_{\theta JC}$	3.6	°C/W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	150, -55~150	°C

Notes:

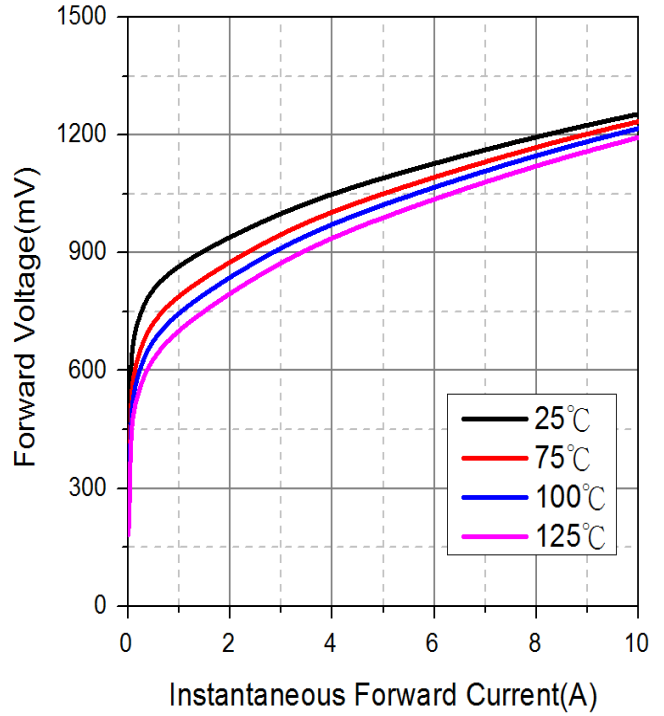
1. Measured at 1MHz and applied reverse voltage of 5V D.C.
2. Pulse Test: Pulse Width=300µs, Duty Cycle ≤ 2%.
3. $I_F=0.5A, I_R=1A, I_{RR}=0.25A$.
4. Surface mounted on 5cm x 5cm x 0.5mm copper pad area.

RATINGS AND CHARACTERISTIC CURVES

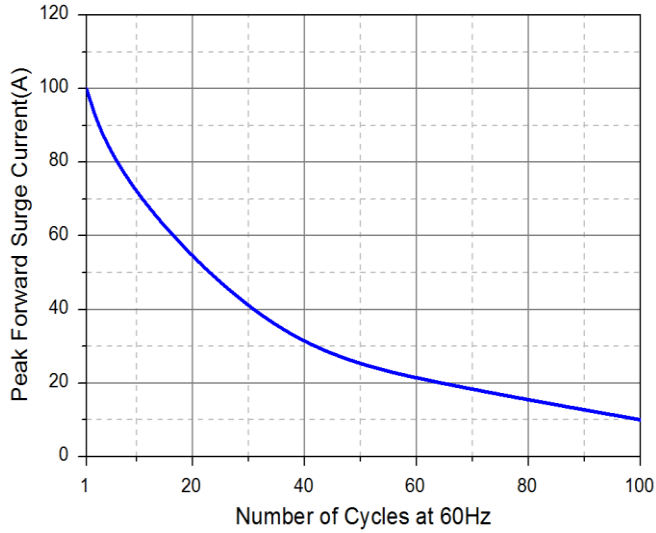
Typical Forward Current Derating Curve



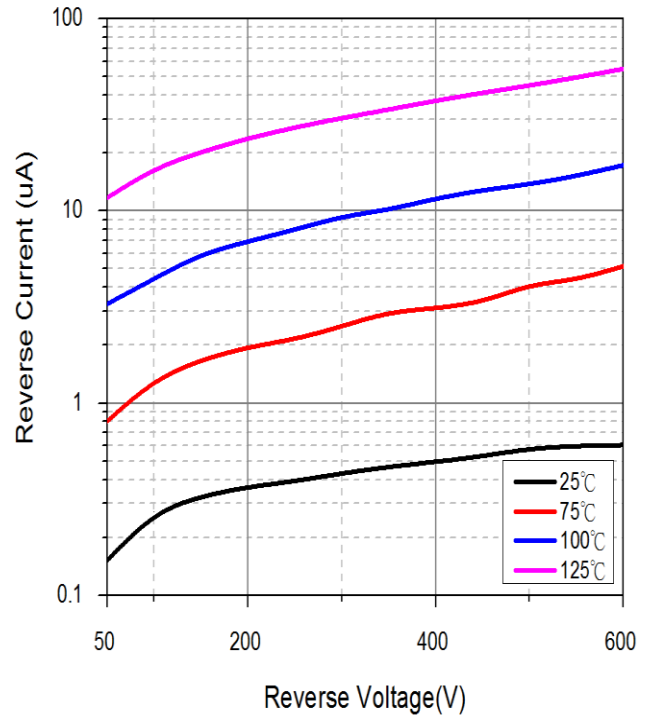
Typical Forward Characteristic



Maximum Non-Repetitive Forward Surge Current



Typical Reverse Characteristic



Typical Junction Capacitance

