Elektronische Bauelemente

SUF11FL Thru SUF18FL

VOLTAGE 50 ~ 600 V

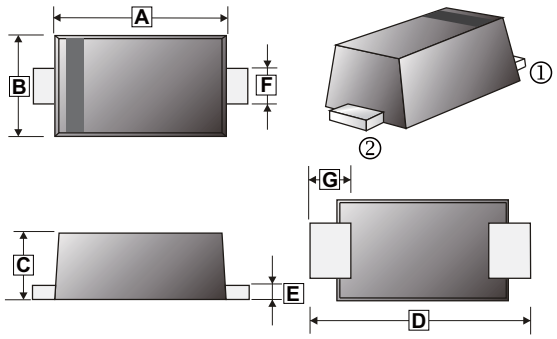
1.0 A Glass Passivated Surface Mount Rectifiers

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

FEATURES

- Glass passivated device
- Ideal for surface mounted applications
- Low leakage current
- Metallurgically bonded construction
- High temperature soldering：
  250°C / 10 seconds at terminals

SOD-123FL



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.70	2.90	E	0.10	0.30
B	2.00	1.80	F	0.80	1.20
C	1.55	1.25	G	0.35	0.85
D	3.50	3.90			

MECHANICAL DATA

- Case: JEDEC SOD-123FL, molded plastic over passivated chip
- Terminals: Solder Plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.003 ounces, 0.01 gram
- Mounting position: Any

MARKING

Part Number	Marking Code	Part Number	Marking Code
SUF11FL	E1	SUF16FL	E6
SUF12FL	E2	SUF18FL	E8
SUF14FL	E4		

PACKAGE INFORMATION

Package	MPQ	LeaderSize
SOD-123FL	2.5K	7' inch

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, derate current by 20%.

PARAMETERS	SYMBOL	PART NUMBERS					UNITS	TESTING CONDITIONS
		SUF 11FL	SUF 12FL	SUF 14FL	SUF 16FL	SUF 18FL		
Recurrent Reverse Voltage (Max.)	V_{RRM}	50	100	200	400	600	V	
RMS Voltage (Max.)	V_{RMS}	35	70	140	280	420	V	
DC Blocking Voltage (Max.)	V_{DC}	50	100	200	400	600	V	
Instantaneous Forward Voltage (Max.) (Note 1)	V_F	0.95			1.25	1.7	V	I_{FM} = 1.0A
Average Forward Rectified Current (Max.)	$I_{(AV)}$	1.0					A	T_A = 65°C
Peak Forward Surge Current	I_{FSM}	20					A	8.3ms single half sine-wave superimposed on rated load (JEDEC method) T_L = 25°C
DC Reverse Current at Rated DC Blocking Voltage (Max.)	I_R	5.0					μA	T_A=25°C
		150						T_A=125°C
Reverse Recovery time (Max.) (Note 2)	T_{RR}	35					nS	
Operating and Storage Temperature Range	T_J, T_{STG}	-55 ~ 150					°C	

Notes：
1. Pulse test：Pulse width 300 ms, duty cycle 1%.
2. Measured with I_F=0.5A, I_R=1A, I_{RR}=0.25A.

RATINGS AND CHARACTERISTIC CURVES (SUF11FL Thru SUF18FL)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

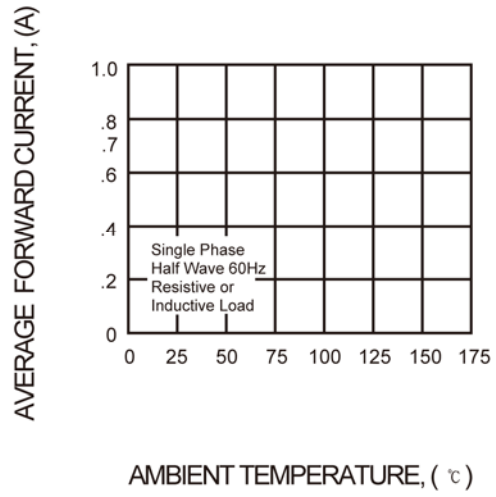


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

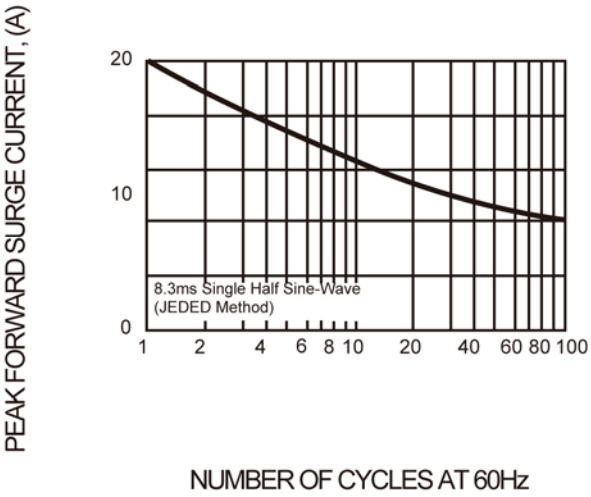


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

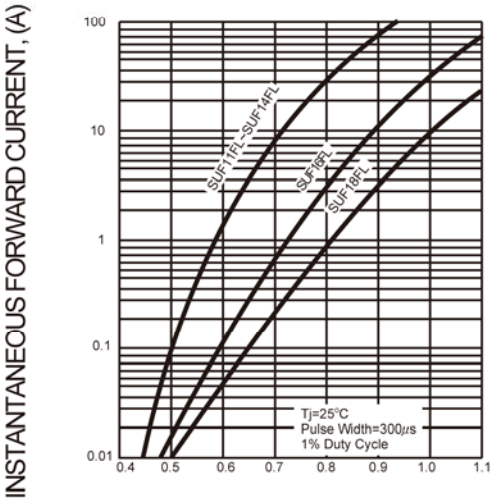


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS