

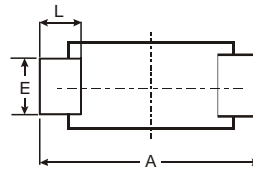
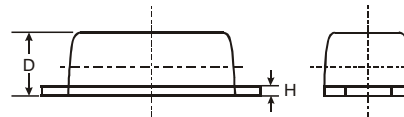
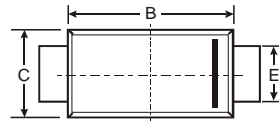
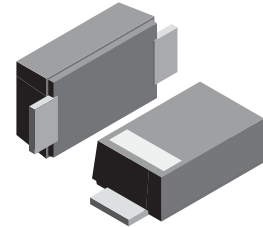
**VOLTAGE RANGE: 20 - 100V**  
**CURRENT: 2.0 A**

### Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High forward surge current capability
- High temperature soldering guaranteed:  
250°C/10 seconds, 0.375(9.5mm) lead length, 5 lbs. (2.3kg) tension

### Mechanical Data

- Case: JEDEC SOD-123FL molded plastic body over passivated junction
- Terminals: Plated axial leads,
- solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.0007 ounce, 0.02 grams



SOD-123FL			
Dim	Min	Max	Typ
A	3.58	3.72	3.65
B	2.72	2.78	2.75
C	1.77	1.83	1.80
D	1.02	1.08	1.05
E	0.097	1.03	1.00
H	0.13	0.17	0.15
L	0.53	0.57	0.55
All Dimensions in mm			



### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

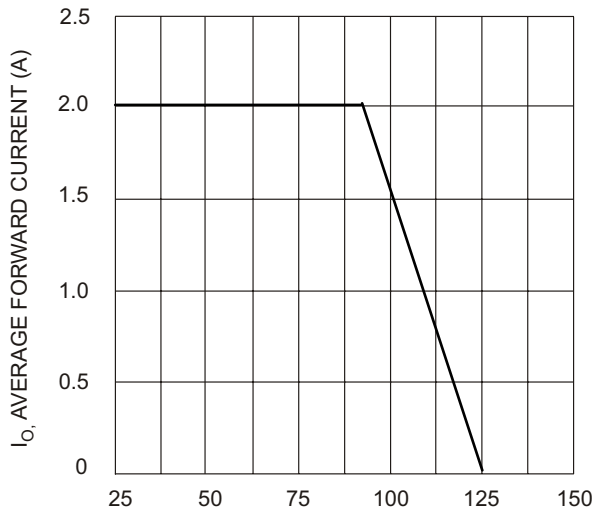
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	SMD22PL	SMD23PL	SMD24PL	SMD25PL	SMD26PL	SMD28PL	SMD210PL	Unit
	Marking	D2	D3	D4	D5	D6	D8	D10	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	V
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	V
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	V
Maximum average forward rectified current	I <sub>(AV)</sub>	2.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	50.0							Amps
Maximum instantaneous forward voltage at 2.0A	V <sub>F</sub>	0.50		0.70			0.85		Volts
Maximum DC reverse current at rated DC blocking voltage <small>T<sub>A</sub>=25°C</small> <small>T<sub>A</sub>=100°C</small>	I <sub>R</sub>	0.5			5.0				mA
Typical junction capacitance (NOTE 1)	C <sub>J</sub>	210							pF
Operating junction temperature range	T <sub>J</sub>	-50 to +125			-50 to +150				°C
Storage temperature range	T <sub>STG</sub>	-50 to +150							°C

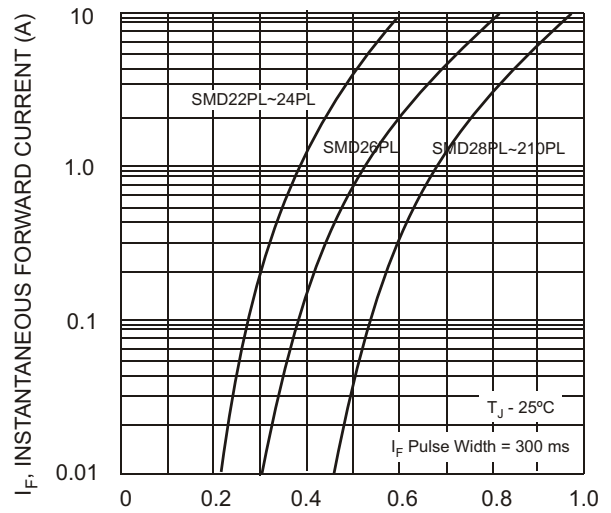
**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.



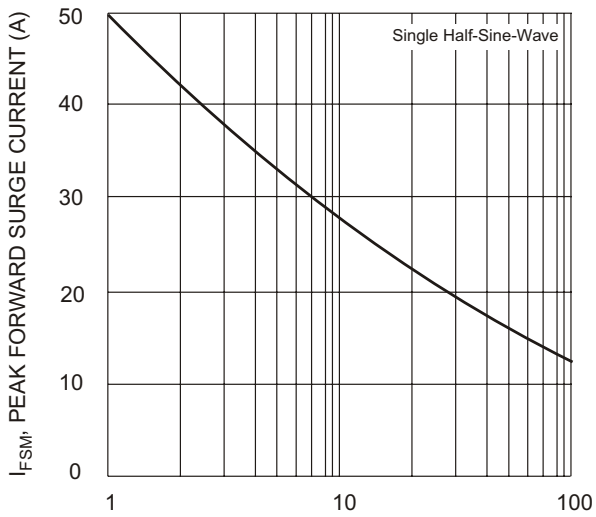
## RATINGS AND CHARACTERISTIC CURVES SMD22PL THRU SMD210PL



$T_L$ , LEAD TEMPERATURE ( $^{\circ}C$ )  
Fig. 1 Forward Current Derating Curve



$V_F$ , INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 2 Typical Forward Characteristics



NUMBER OF CYCLES AT 60 Hz  
Fig. 3 Max Non-Repetitive Peak Forward Surge Current