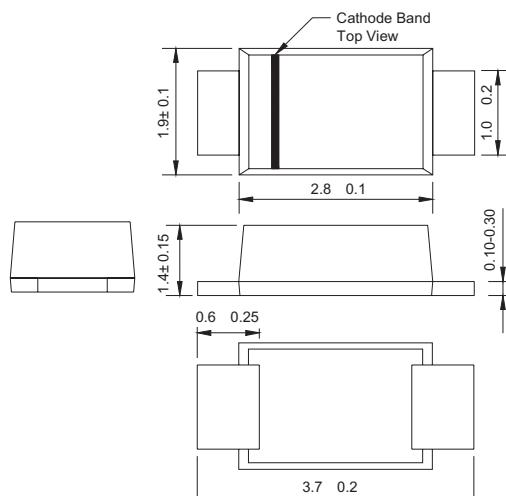


## ■ FEATURES

- Low profile package
- Ideal for automated placement
- Ultra fast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- High temperature soldering: 260°C / 10 sec at terminals

## ■ MECHANICAL DATA

- Molded plastic body (JEDEC SOD-123FL)
- Terminals: Solder plated
- Polarity: Laser band denotes cathode end
- Weight: 0.017 grams



**SOD-123FL**

Dimensions in inches and (millimeters)

## ■ MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

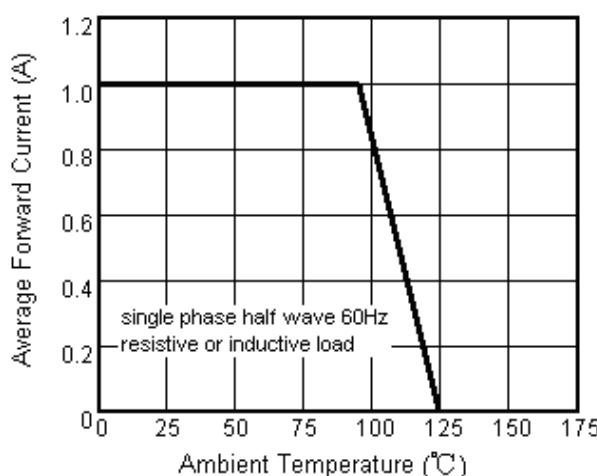
Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

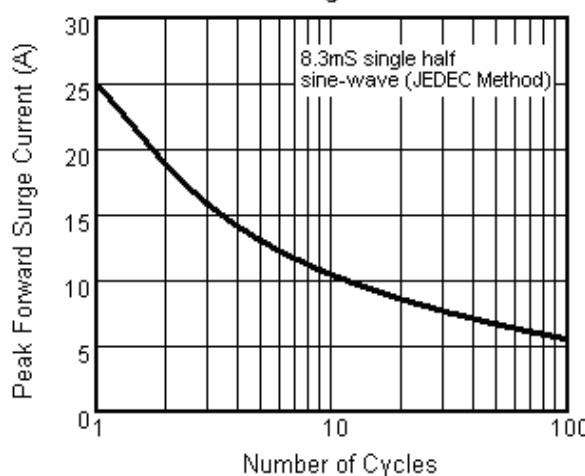
Parameter	Symbol	DSK12	DSK13	DSK14	DSK15	DSK16	DSK18	DSK110	Unit				
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	V				
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	V				
Maximum DC Blocking Voltage	V <sub>Dc</sub>	20	30	40	50	60	80	100	V				
Maximum Average Forward Rectified Current @ T <sub>L</sub> = 90°C	I <sub>F(AV)</sub>	1.0							A				
Peak Forward Surge Current 8.3ms Single Half-Sine Wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	25							A				
Maximum Instantaneous I <sub>F</sub> = 1.0A	V <sub>F</sub>	0.55		0.70		0.85			V				
Maximum DC Reverse Current @ T <sub>A</sub> = 25°C at rated DC Blocking Voltage @ T <sub>A</sub> = 100°C	I <sub>R</sub>			1.0		10			mA				
Typical Junction Capacitance at 4.0 V, 1MHz	C <sub>J</sub>	110							--				
Operating Temperature Range	T <sub>J</sub>	-65 to +125							°C				
Storage Temperature Range	T <sub>STG</sub>	-65 to +125							°C				

■ RATING & CHARACTERISTIC CURVES

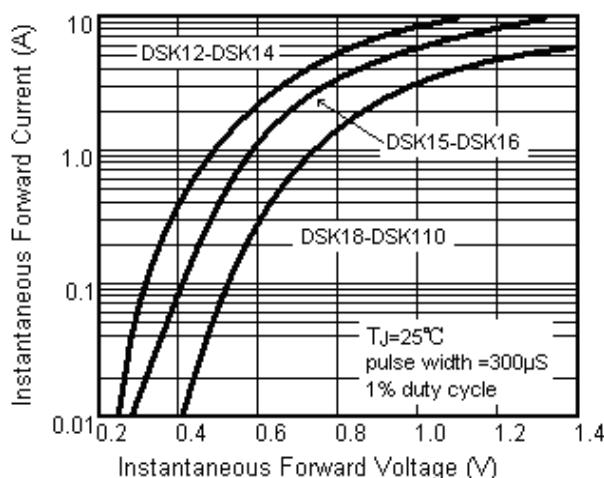
**Fig.1 Forward Current Derating Curve**



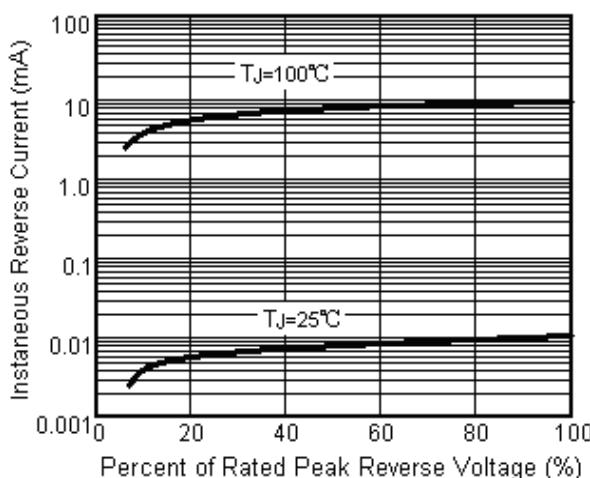
**Fig.2 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Reverse Characteristics**



**Fig.5 Typical Junction Capacitance**

