

## Surface Mount Schottky Rectifier

## DSK12~DSK110

### Major Ratings and Characteristics

$I_{F(AV)}$	1.0 A
$V_{RRM}$	20 V to 100 V
$I_{FSM}$	25 A
$V_F$	0.55 V , 0.70 V, 0.85V
$T_j \text{ max.}$	125 C

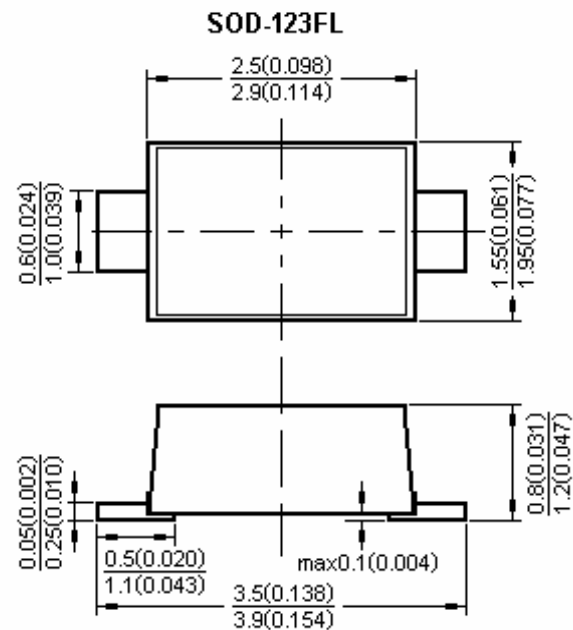


### Features

- Low profile package
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- High temperature soldering:  
260°C/10 seconds at terminals
- Component in accordance to  
RoHS 2002/95/1 and WEEE 2002/96/EC

### Mechanical Data

- **Case:** JEDEC SOD-123FL molded plastic body over passivated chip
- **Terminals:** Solder plated, solderable per J-STD-002B and JESD22-B102D
- **Polarity:** Laser band denotes cathode end



Dimensions in millimeters and (inches)

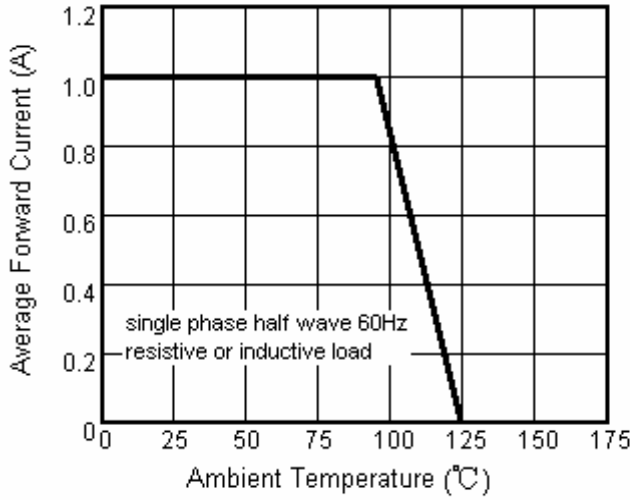
### Maximum Ratings & Thermal Characteristics & Electrical Characteristics

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

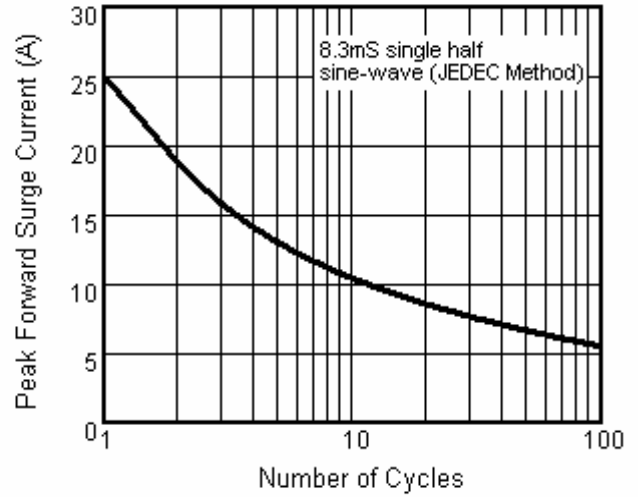
	Symbol	DSK12	DSK13	DSK14	DSK15	DSK16	DSK18	DSK110	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	V
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	56	70	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	V
Maximum average forward rectified current	$I_{F(AV)}$	1							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	25							A
Maximum instantaneous forward voltage at 1.0A	$V_F$	0.55		0.70		0.85		V	
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at Rated DC blocking voltage $T_A = 100^\circ\text{C}$	$I_R$	1.0 10							mA
Typical junction capacitance at 4.0 V , 1MHz	$C_J$	110							
Operating junction and storage temperature range	$T_J, T_{STG}$	- 65 to +125							$^\circ\text{C}$

**Characteristic Curves ( $T_A=25^\circ\text{C}$  unless otherwise noted)**

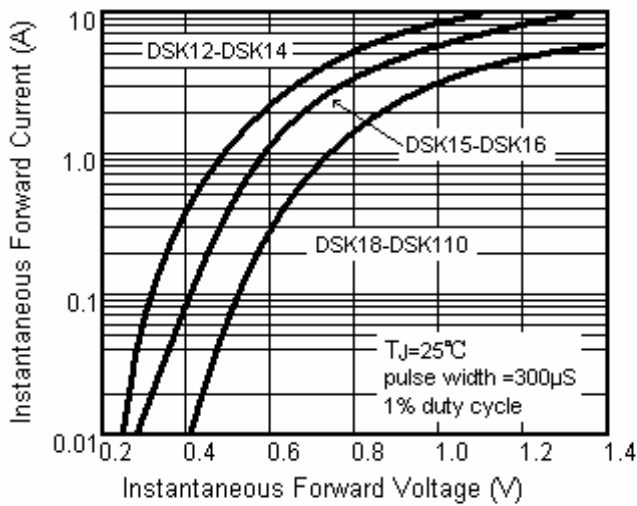
**Fig.1 Forward Current Derating Curve**



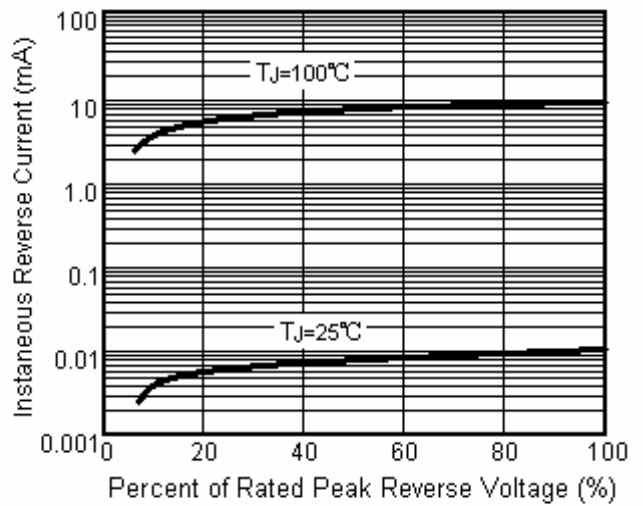
**Fig.2 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Reverse Characteristics**



**Fig.5 Typical Junction Capacitance**

