



DSK12~DSK110

Surface Mount Schottky rectifier

### 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

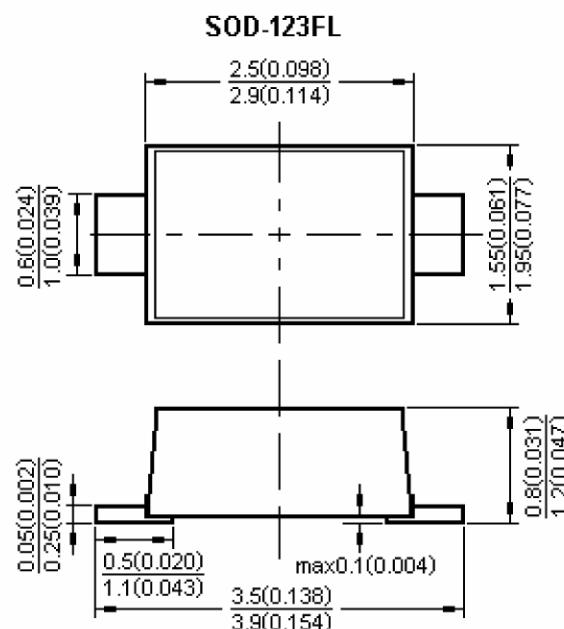


### Features

- 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

(TA = 25 °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					mA
				10					
Typical junction capacitance at 4.0 V, 1MHz	$C_J$			110					
Operating junction and storage temperature range	$T_J, T_{STG}$			– 65 to +125					°C



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

Fig.1 Forward Current Derating Curve

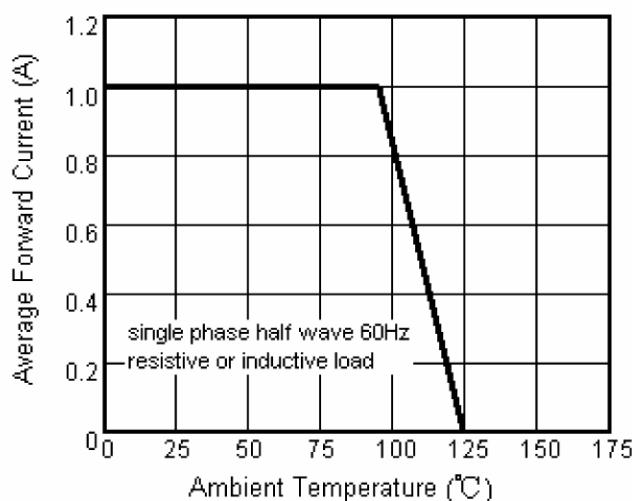


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

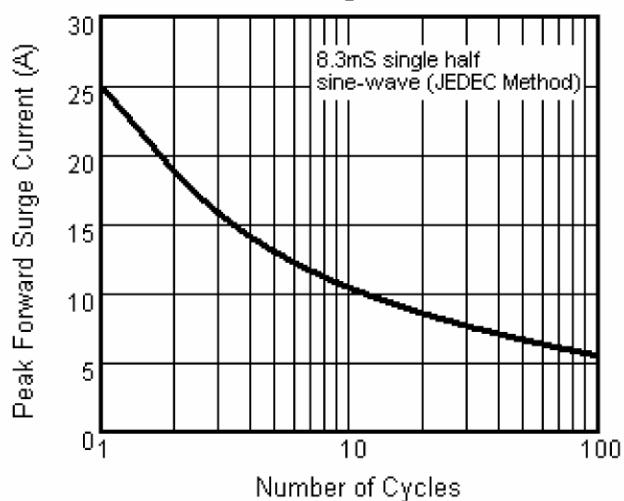


Fig.3 Typical Instantaneous Forward Characteristics

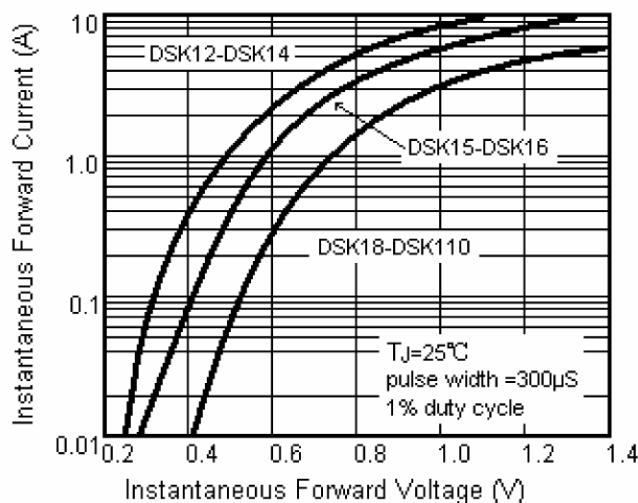


Fig.4 Typical Reverse Characteristics

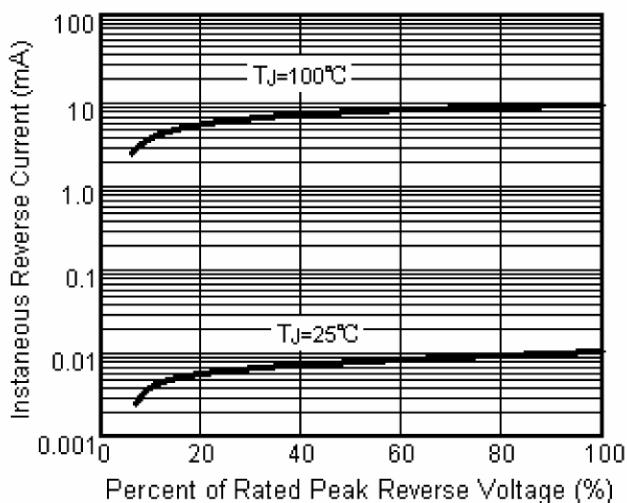


Fig.5 Typical Junction Capacitance

