

DSK12 THRU DSK110

1.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS



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
- Lead free Finish/ROHS Compliant

Mechanical Date

- **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
- **Weight:** 0.0092gram

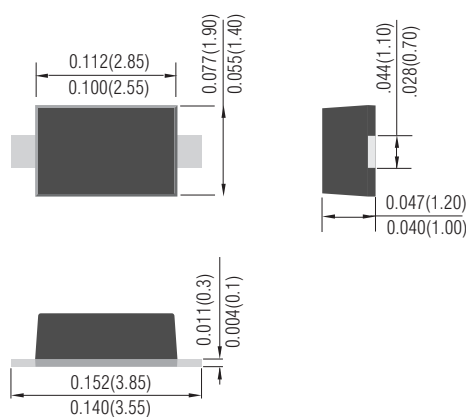
VOLTAGE RANGE

20 to 100 Volts

CURRENT

1.0 Ampere

SOD-123FL



Dimensions in inches and (millimeters)

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}	30							A	
Maximum instantaneous forward voltage at 1.0A	V_F	0.50	0.55	0.70		0.85		V		
Maximum DC reverse current at Rated DC blocking voltage	I_R	$T_A = 25^\circ\text{C}$ 0.5				$T_A = 100^\circ\text{C}$ 10				mA
Typical thermal resistance	$R_{\theta JL}$	28							$^\circ\text{C/W}$	
Operating junction and storage temperature range	T_J, T_{STG}	- 65 to +125							$^\circ\text{C}$	

RATING AND CHARACTERISTIC CURVES (DSK12 THRU DSK110)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

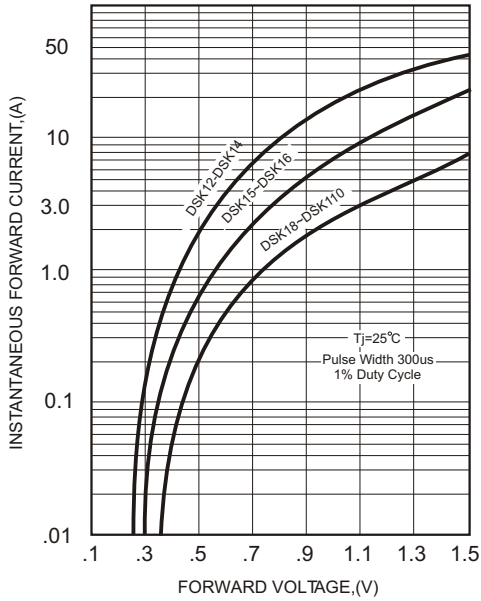


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

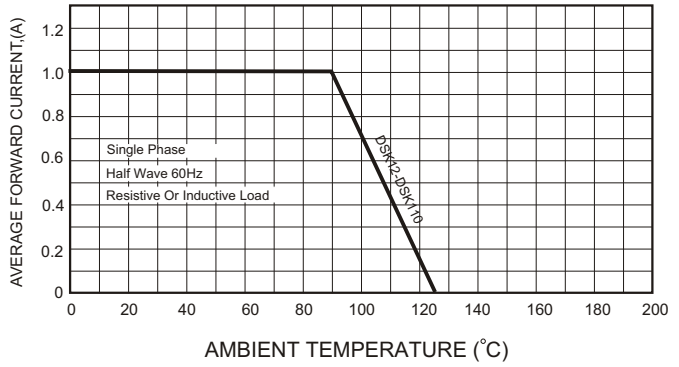


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

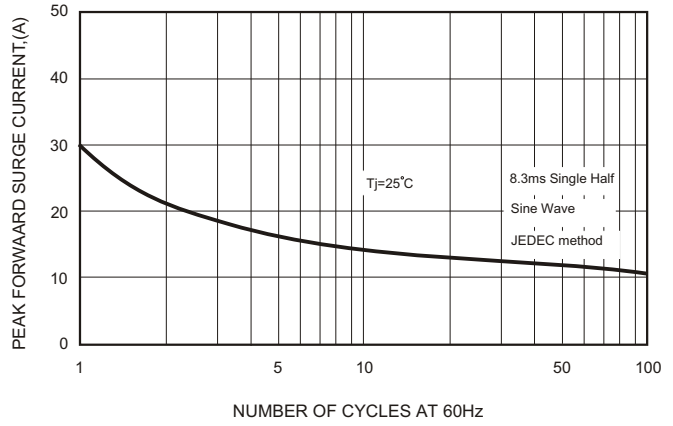


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

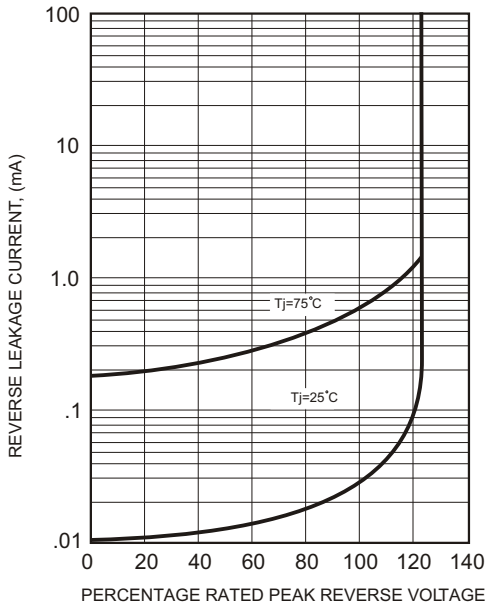


FIG.5-TYPICAL JUNCTION CAPACITANCE

