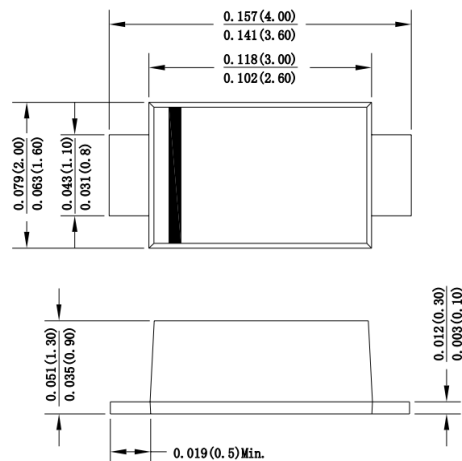


Features

- ✧ 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

SOD-123FL



Dimensions in inches and (millimeters)

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

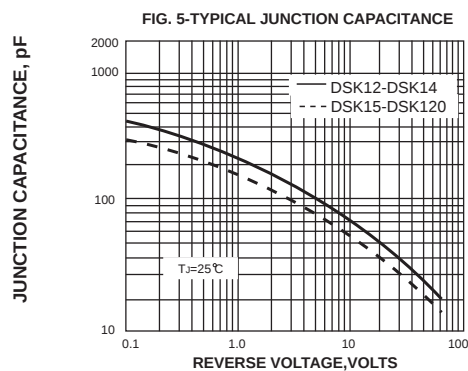
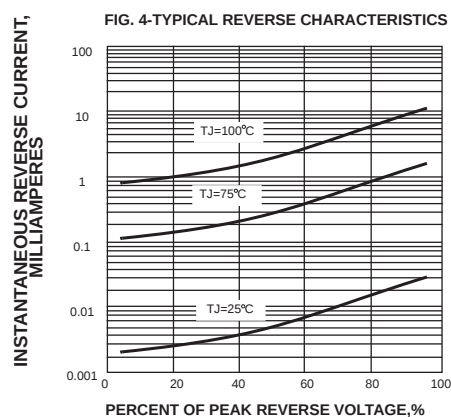
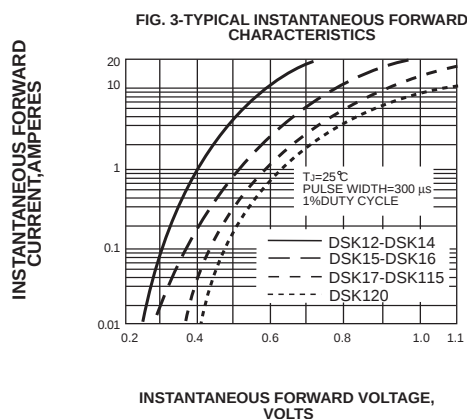
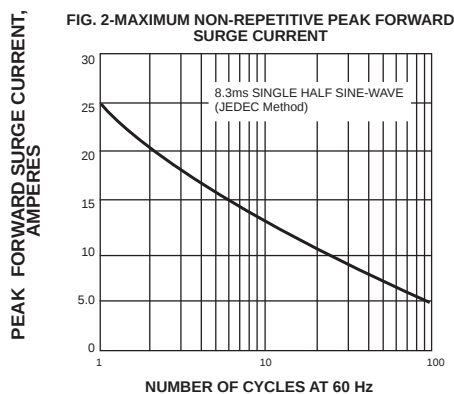
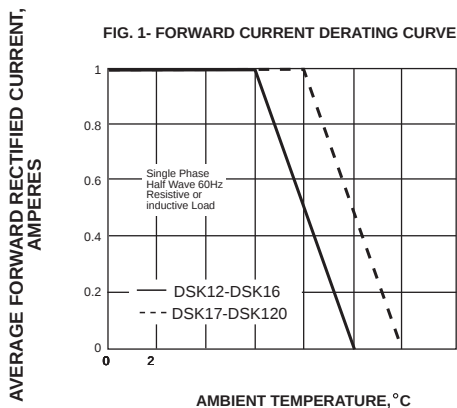
Maximum Ratings & Thermal Characteristics & Electrical Characteristics

(TA = 25 °C unless otherwise noted)

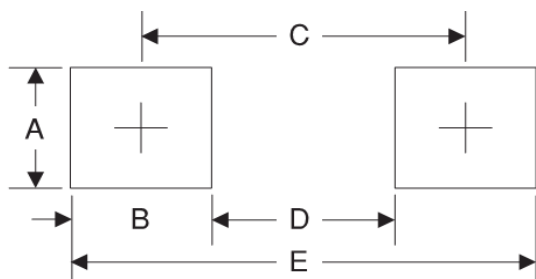
MDD Catalog Number	SYMBOLS	DSK12	DSK13	DSK14	DSK15	DSK16	DSK17	DSK18	DSK19	DSK110	DSK115	DSK120	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	70	80	90	100	150	200	VOLTS
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	49	56	63	70	105	140	VOLTS
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	70	80	90	100	150	200	VOLTS
Maximum average forward rectified current	$I_{(AV)}$	1.0											Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25.0											Amps
Maximum instantaneous forward voltage at 1.0A	V_F	0.55			0.70		0.85					0.95	Volts
Maximum DC reverse current $T_A=25^{\circ}C$ at rated DC blocking voltage $T_A=100^{\circ}C$	I_R	0.5									0.2		mA
		10.0				5.0			2.0				
Typical junction capacitance (NOTE 1)	C_J	110				80							pF
Operating junction temperature range	T_J	-65 to +125						-65 to +150					$^{\circ}C$
Storage temperature range	T_{STG}	-65 to +150											$^{\circ}C$

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

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



Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	1.2	0.048
B	1.15	0.045
C	3.10	0.122
D	1.95	0.077
E	4.25	0.167