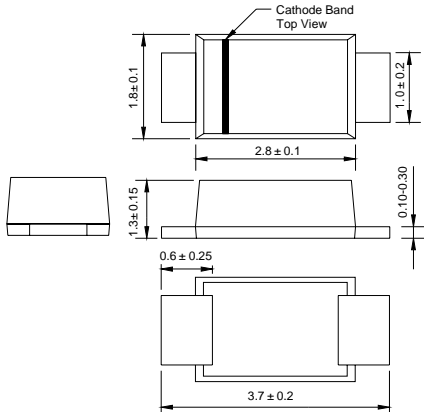


**SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER**

Reverse Voltage - 40 olts Forward Current - 2.0 Ampere

**SOD-123FL**



Dimensions in millimeters

**FEATURES**

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:  
250°C/10 seconds, 0.375" (9.5mm) lead length,  
5 lbs. (2.3kg) tension

**MECHANICAL DATA**

**Case:** JEDEC SOD-123FL molded plastic body  
**Terminals:** Solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.0007 ounce, 0.02 grams

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

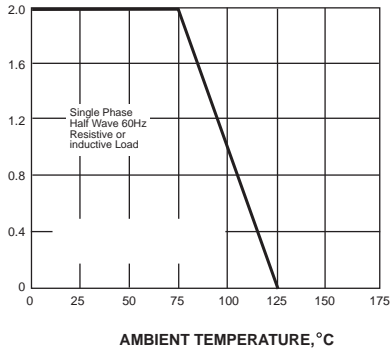
Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Catalog Number	SYMBOLS	DSK24	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	40	VOLTS
Maximum RMS voltage	$V_{RMS}$	28	VOLTS
Maximum DC blocking voltage	$V_{DC}$	40	VOLTS
Maximum average forward rectified current	$I_{(AV)}$	2.0	Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	40.0	Amps
Maximum instantaneous forward voltage at 2.0A	$V_F$	0.55	Volts
Maximum DC reverse current at rated DC blocking voltage	$I_R$	$T_A=25^{\circ}C$ 0.5	mA
		$T_A=100^{\circ}C$ 10.0	
Typical junction capacitance (NOTE 1)	$C_J$	220	pF
Operating junction temperature range	$T_J$	-50 to +125	°C
Storage temperature range	$T_{STG}$	-50 to +150	°C

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

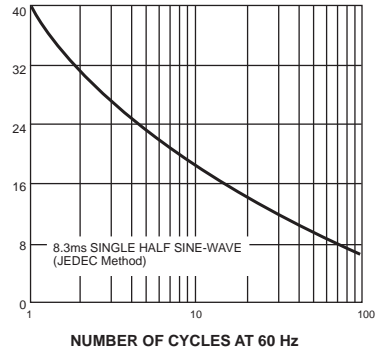
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



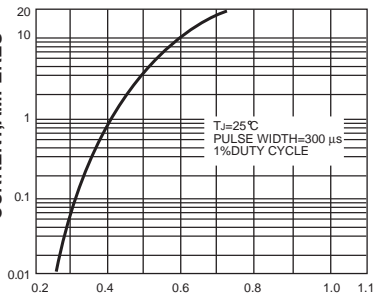
PEAK FORWARD SURGE CURRENT, AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



INSTANTANEOUS FORWARD CURRENT, AMPERES

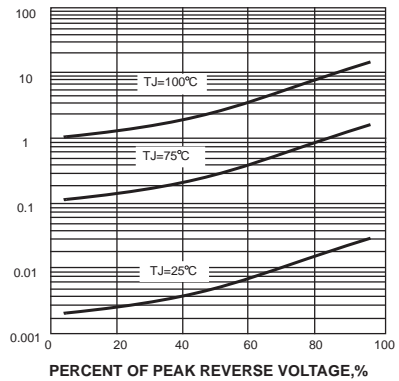
FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

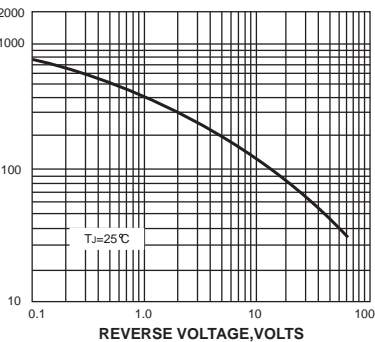
FIG. 4-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF PEAK REVERSE VOLTAGE, %

JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



REVERSE VOLTAGE, VOLTS