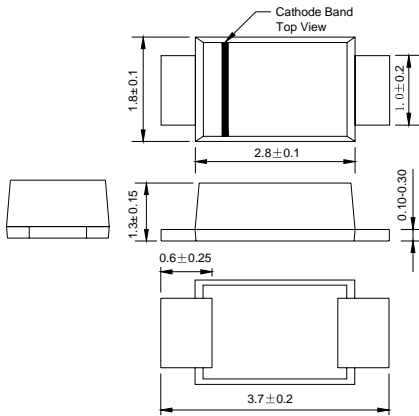




**SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER**

Reverse Voltage - 20 to 100 Volts Forward Current - 2.0 Ampere

**SOD-123F**



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
- ◆ Green compound (halogen & Sb<sub>2</sub>O<sub>3</sub> free)

**MECHANICAL DATA**

**Case:** JEDEC SOD-123F 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%.

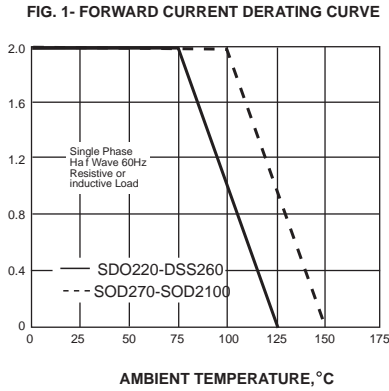
	SYMBOLS	SOD220	SOD230	SOD240	SOD250	SOD260	SOD270	SOD280	SOD290	SOD2100	UNITS
	MARK	D22	D23	D24	D25	D26	D27	D28	D29	D320	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	50	60	70	80	90	100	VOLTS
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	49	56	63	70	VOLTS
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	50	60	70	80	90	100	VOLTS
Maximum average forward rectified current	I <sub(av)< sub=""></sub(av)<>	2.0									Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	40.0									Amps
Maximum instantaneous forward voltage at 2.0A	V <sub>F</sub>	0.50			0.70		0.85				Volts
Maximum DC reverse current at rated DC blocking voltage	I <sub>R</sub>	0.5			0.5						mA
Typical junction capacitance (NOTE 1)	C <sub>J</sub>	220			80						pF
Operating junction temperature range	T <sub>J</sub>	-65 to +125			-65 to +150						°C
Storage temperature range	T <sub>STG</sub>	-65 to +150									°C

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

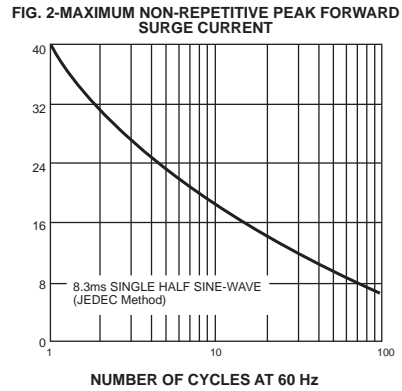


## RATINGS AND CHARACTERISTIC CURVES U1A THRU U1M

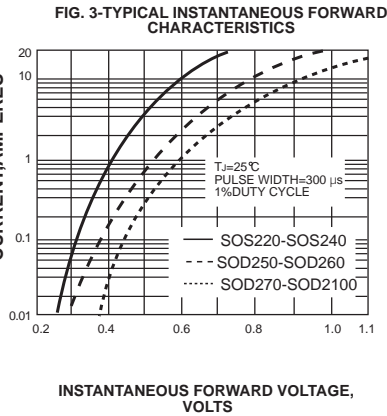
AVERAGE FORWARD RECTIFIED CURRENT,  
AMPERES



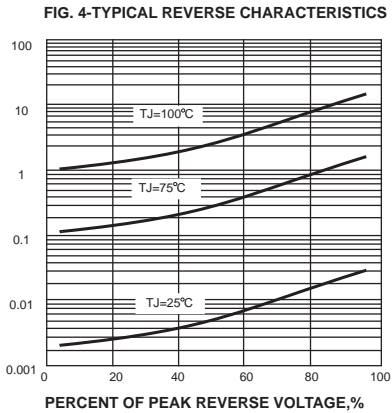
PEAK FORWARD SURGE CURRENT,  
AMPERES



INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT,  
MILLIAMPERES



JUNCTION CAPACITANCE, pF

