

A1 THRU A7

Features

- Glass passivated die construction
- High current capability
- High surge capability
- Low profile surface mounted application in order to optimize board space

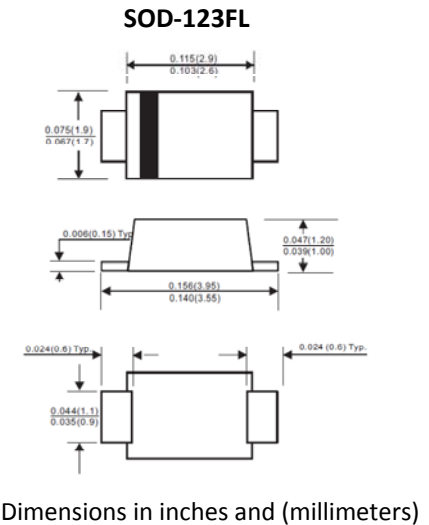
Mechanical Data

Case: SOD-123FL, molded plastic

Terminals: plated leads solderable perMIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting position: Any



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load

For capacitive load, derate current by 20%

TYPE NUMBER	SYMBOL	A1	A2	A3	A4	A5	A6	A7	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Average Rectified Output Current	I_O	1.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
Forward Voltage per element @IF=1.0A	V_{FM}	1.1							V
Peak Reverse Current @TA =25 °C At Rated DC Blocking Voltage @TA =100 °C	I_R	5.0 100							uA
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	70							°C/W
Typical junction capacitance (NOTE1)	C_J	15							pF
Operating and Storage Temperature Range	T_J, T_{STG}	-55to+150							°C

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. Mounted on FR-4 PCB copper, minimum recommended pad layout

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Characteristic Curves

FIG.1-TYPICAL FORWARD CHARACTERISTICS

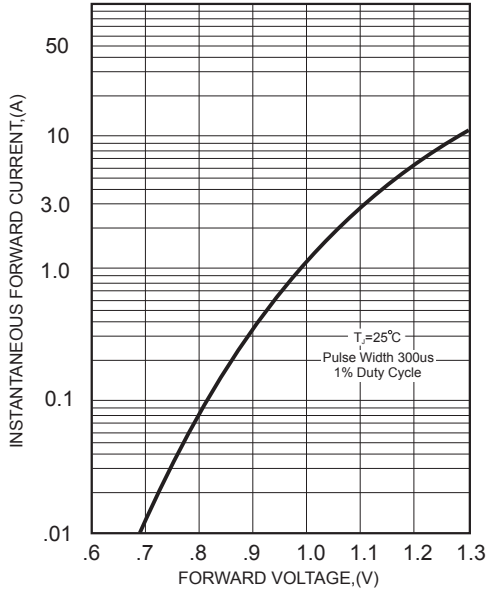


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

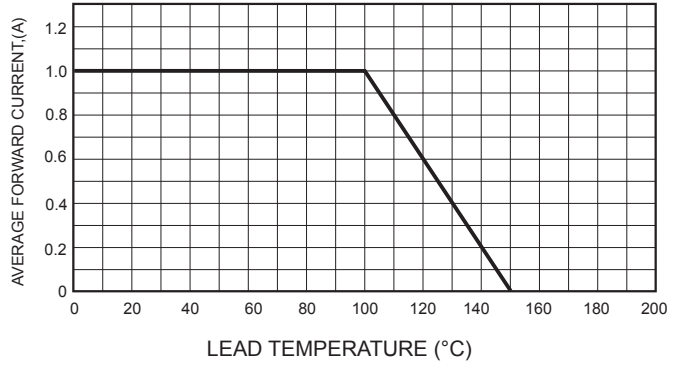


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

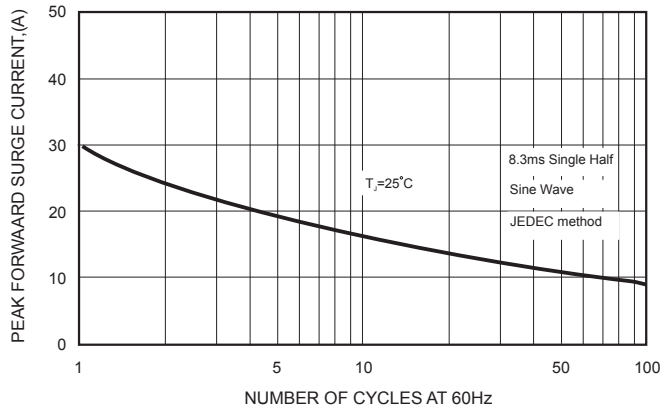


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

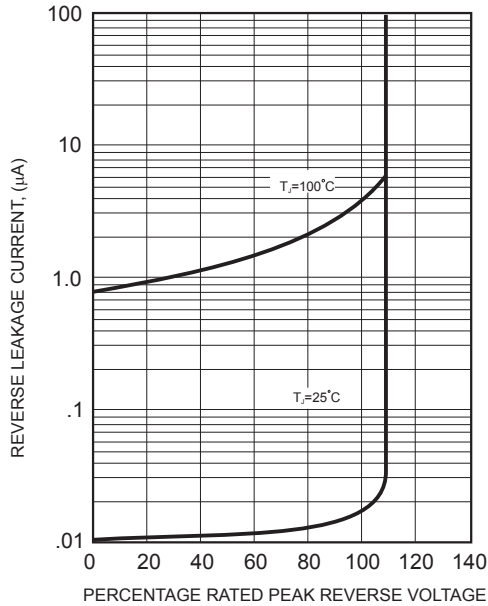


FIG.5-TYPICAL JUNCTION CAPACITANCE

