

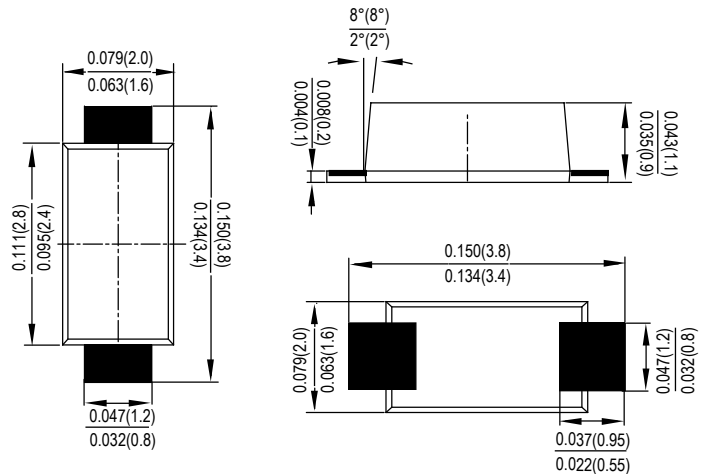
Features

- Glass passivated device
- Ideal for surface mouted applications
- Low reverse leakage
- Metallurgically bonded construction
- High temperature soldering guaranteed:
260 °C /10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: SOD-123FL, molded plastic
- Terminals: plated leads solderable per
MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any

SOD-123FL



Dimensions in inches and (millimeters)

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	US1AL	US1BL	US1DL	US1GL	US1JL	US1KL	US1ML	UNITS
	Code	UA	UB	UD	UG	UJ	UK	UM	
Peak Repetitive Reverse Voltage	V _{RRM}								V
Working Peak Reverse Voltage	V _{RWM}	50	100	200	400	600	800	1000	
DC Blocking Voltage	V _{DC}								
RMS Reverse Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current @T _A =30 °C	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 @I _F =1.0A	V _{FM}	1.0		1.4		1.7		V	
Peak Reverse Current @T _A =25 °C At Rated DC Blocking Voltage @T _A =100 °C	I _R	5.0				100			µA
Maximum reverse recovery time (NOTE 1)	t _{rr}	50				75			ns
Typical thermal resistance	R _{θJA}	180							°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55to+150							°C

Note:1.Measured with I_F=0.5A, I_R=1A, I_{rr}=0.25A.

FIG. 1- FORWARD CURRENT DERATING CURVE

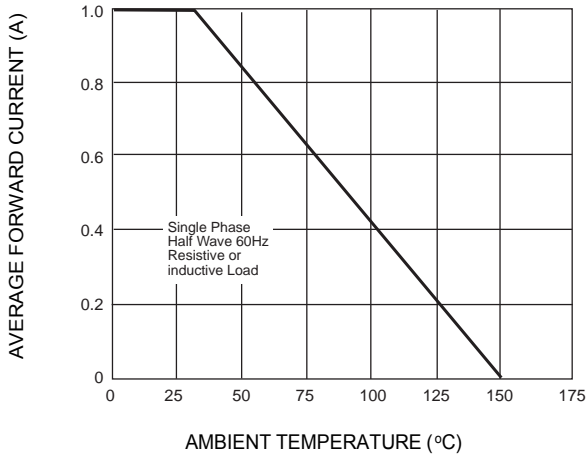


FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

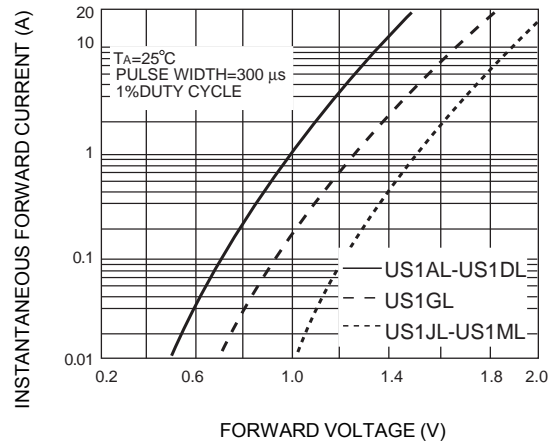


FIG. 3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

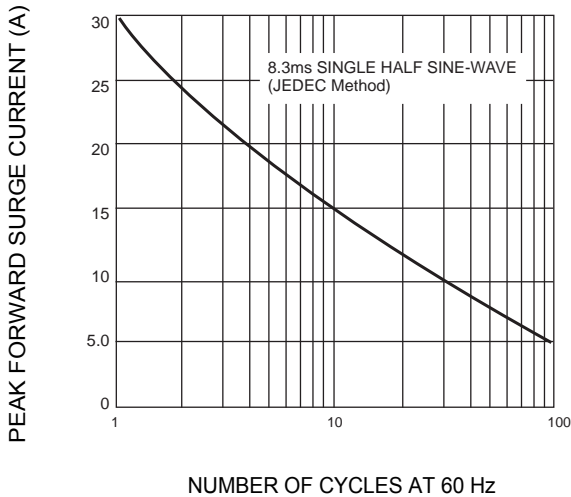


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

