

FEATURES

- Low forward surge current
- Ideal for surface mounted applications
- Low leakage current

Mechanical Data

Case: JEDEC SOD-123FL, molded plastic over passivated chip

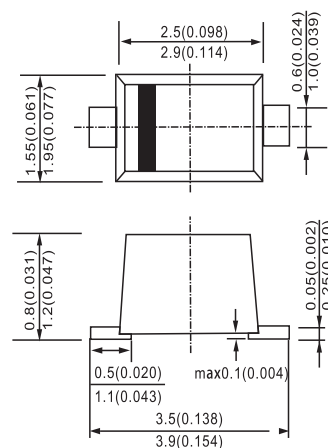
Terminals: Solder Plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Weight: 0.006 ounces, 0.02 gram

Mounting position: Any

SOD-123FL



Dimensions in millimeters

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, derate current by 20%.

		UF 07A	UF 07B	UF 07D	UF 07G	UF 07J	UF 07K	UF 07M	UNITS
Device marking code		UA	UB	UD	UG	UJ	UK	UM	
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current @ $T_A=75^\circ\text{C}$	$I_{(AV)}$	0.7							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	20							A
Maximum instantaneous forward voltage @ $I_{FM}=0.7\text{A}$ (Note 1)	V_F	1	1.0		1.4		1.7		V
Maximum DC reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=125^\circ\text{C}$	I_R				10 200				μA
Maximum reverse recovery time (Note 2)	t_{rr}		50			75			ns
Typical thermal resistance junction to lead	$R_{\theta JA}$	180							$^\circ\text{C/W}$
Operating temperature range	T_J	- 55 --- + 150							$^\circ\text{C}$
Storage temperature range	T_{STG}	- 55 --- + 150							$^\circ\text{C}$

NOTE1. Pulse test: pulse width 300 μsec , duty cycle 2%.

2. Measured with $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $t_{rr}=0.25\text{A}$.

RATINGS AND CHARACTERISTIC CURVES UF07A THRU UF07M

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

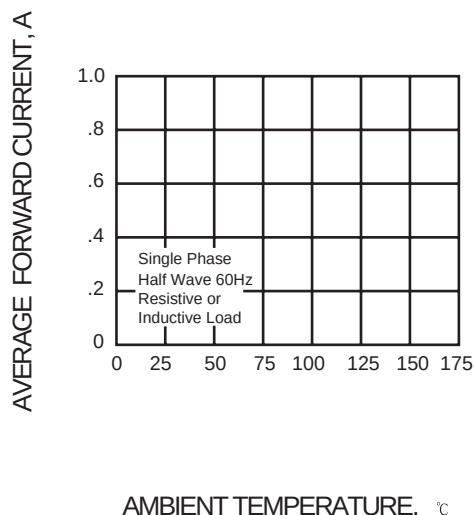


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

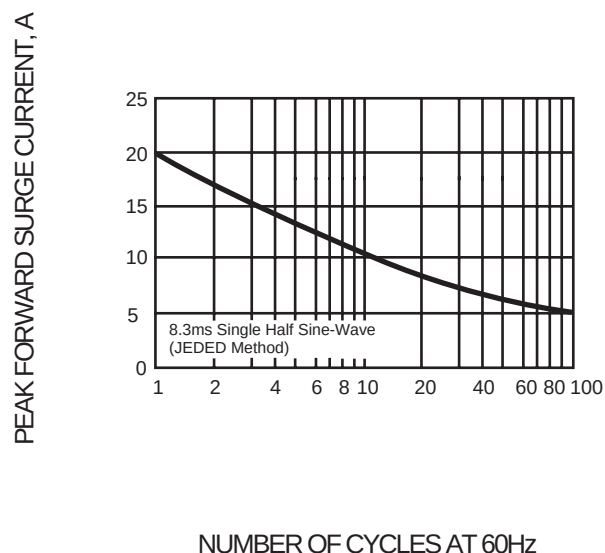


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

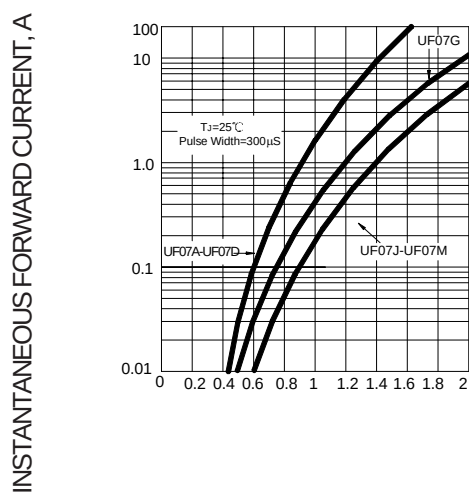


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

