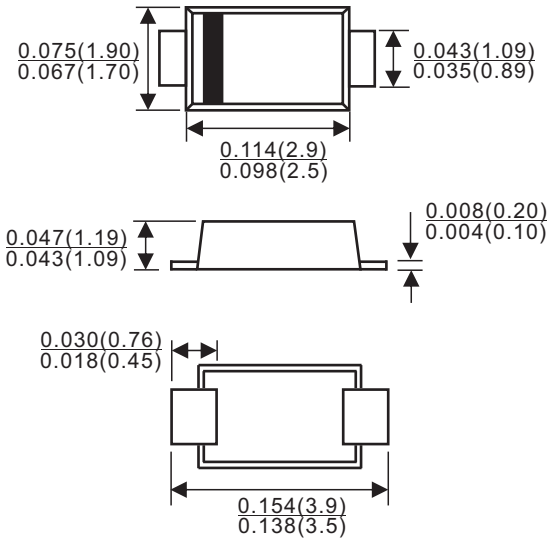
UF07A-UF07M

High Efficiency Rectifiers

RoHS COMPLIANT

REVERSE VOLTAGE: 50 - 1000 V
CURRENT: 1.0A

SOD-123FL



Dimensions in inches and(millimeters)

Features

- ✧ Low forward surge current
- ✧ Ideal for surface mouted applications
- ✧ Low leakage current

Mechanical Data

- ✧ Case:JEDEC SOD-123FL,molded plastic over passivated chip
- ✧ Polarity: Color band denotes cathode end
- ✧ Weight: 0.006 ounces, 0.02 gram
- ✧ Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

ABSOLUTE RATINGS

		UF 07A	UF 07B	UF 07D	UF 07G	UF 07J	UF 07K	UF 07M	UNITS
Device marking code		U1A	U1B	U1D	U1G	U1J	U1K	U1M	
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°C	$I_{(AV)}$	1.0							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}=0.7A (Note 1)	V_F	1.0			1.4	1.7			V
Maximum DC reverse current @T_A=25°C at rated DC blocking voltage @T_A=125°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							°C/W
Operating temperature range	T_j	- 55 --- + 150							°C
Storage temperature range	T_{STG}	- 55 --- + 150							°C

NOTE1.Pulse test: pulse width 300μsec,duty cycle 2%.
2.Measured with I_F=0.5A,I_R=1.0A,I_{rr}=0.25A.

Ratings AND Charactieristic Curves

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

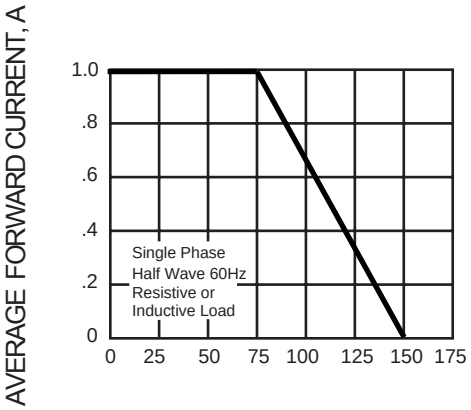


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

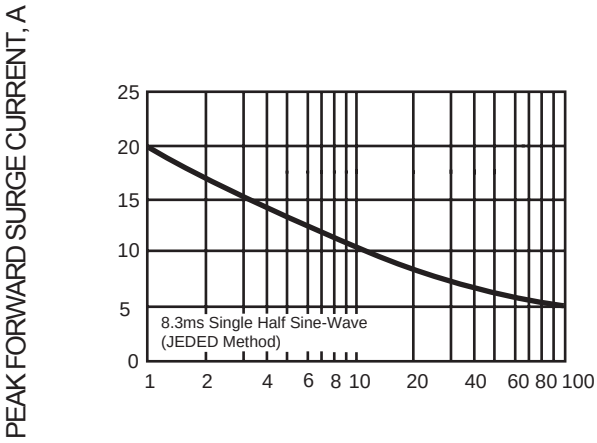


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

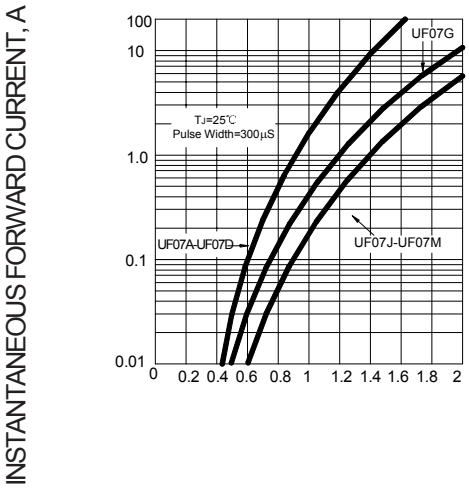
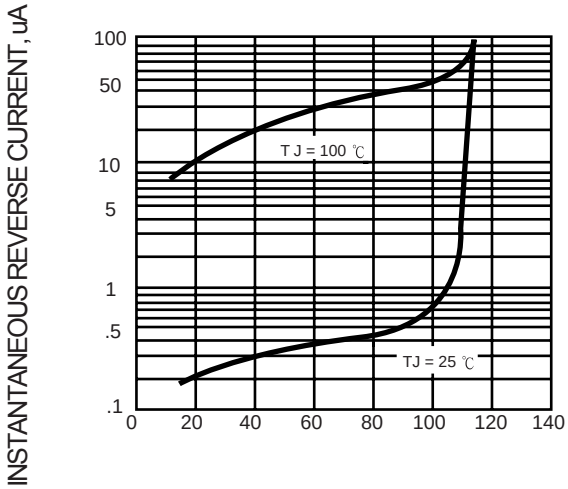


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SOD-123FL	3000/REEL	90000	40X20X22	5.00	4.00