TS VISHAY

HIGH EFFICIENCY RECTIFIERS

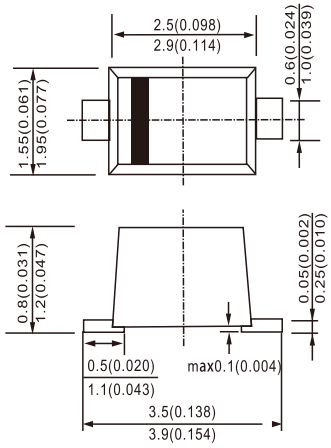
UF07A THRU UF07M

50V -1000V 0.7A

FEATURES

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

SOD-123FL



Dimensions in millimeters

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase,half wave,60Hz,resistive or inductive load.For capactive 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℃	$I_{(AV)}$	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}=0.7A (Note 1)	V_F	1	1.0		1.4		1.7		V
Maximum DC reverse current @T_A=25℃	I_R	10							μA
at rated DC blocking voltage @T_A=125℃		200							
Maximum reverse recovery time (Note 2)	t_{rr}	50				75			ns
Typical thermal resistance junction to lead	$R_{\theta JA}$	180							℃/W
Operating temperature range	T_j	- 55 --- + 150							℃
Storage temperature range	T_{STG}	- 55 --- + 150							℃

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 CHARACTERISTIC CURVES UF07A THRU UF07M

FIG. 1 – TYPICAL FORWARD CURRENT DERATING CURVE

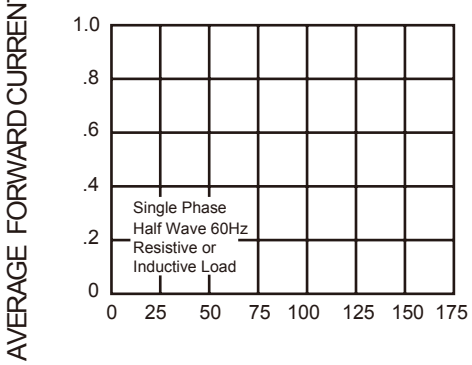


FIG. 2 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

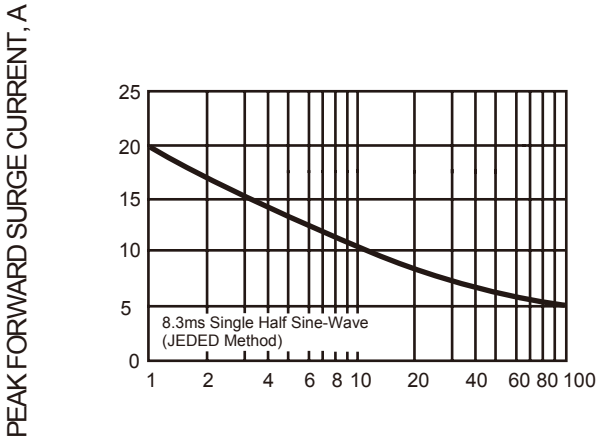


FIG. 3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

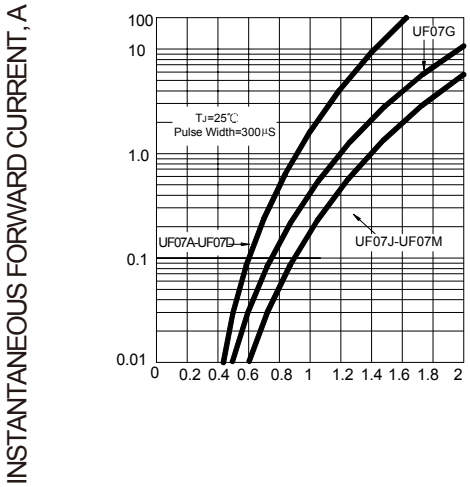


FIG. 4 – TYPICAL REVERSE CHARACTERISTICS