



TAYCHIPST

HIGH EFFICIENCY RECTIFIERS

UF07A THRU UF07M

50V -1000V 0.7A

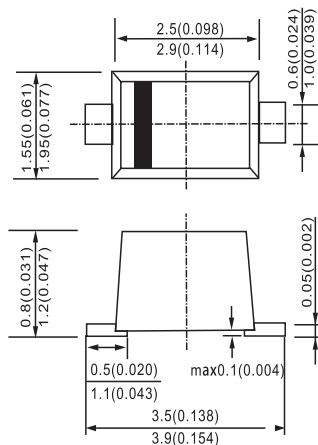
FEATURES

- Low forward surge current
- Ideal for surface mouted 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 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 @ $T_A=75$	$I_{(AV)}$	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 @ $T_A=25$ at rated DC blocking voltage @ $T_A=125$	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							/W
Operating temperature range	T_j	- 55 --- + 150							
Storage temperature range	T_{STG}	- 55 --- + 150							

NOTE1.Pulse test: pulse width 300 μ sec,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

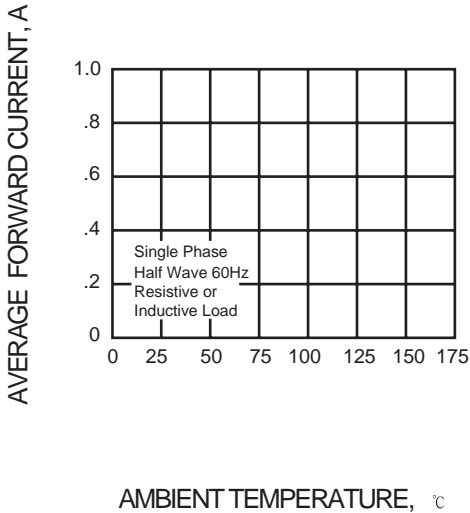


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

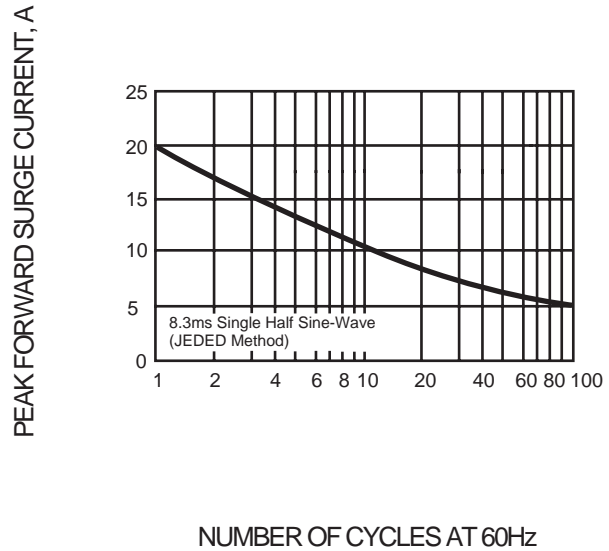


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

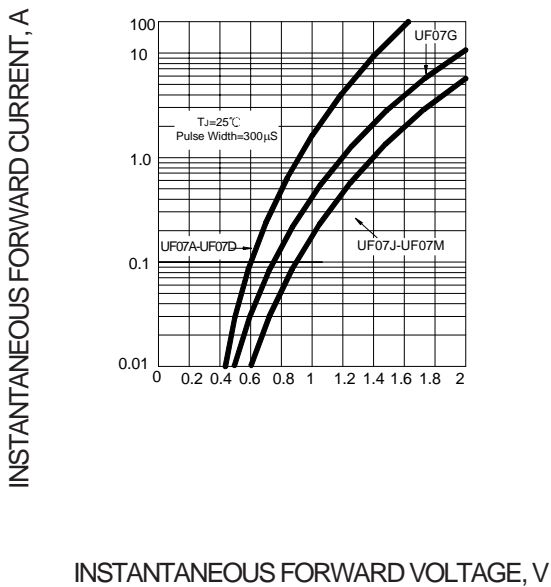


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

