

UF07A-UF07M

High Efficiency Rectifiers

REVERSE VOLTAGE: 50 - 1000 V

CURRENT: 1.0A

SOD - 123FL

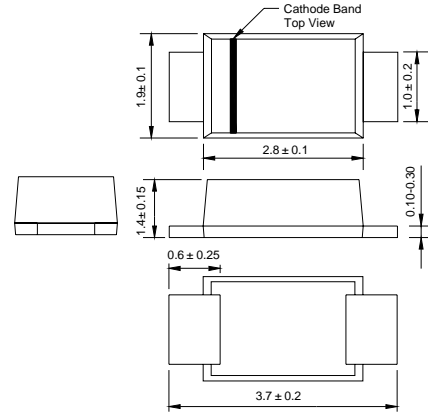


Features

- 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 capacitive 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		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 @ $T_A=75$	$I_{(AV)}$	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 @ $T_A=25$ at rated DC blocking voltage @ $T_A=125$	I_R				10					μA
					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								

NOTE 1. 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

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

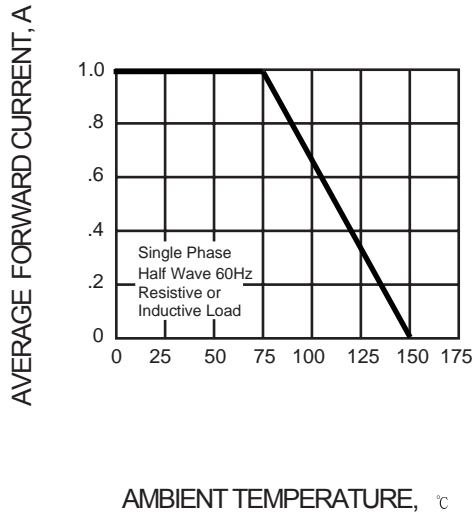


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

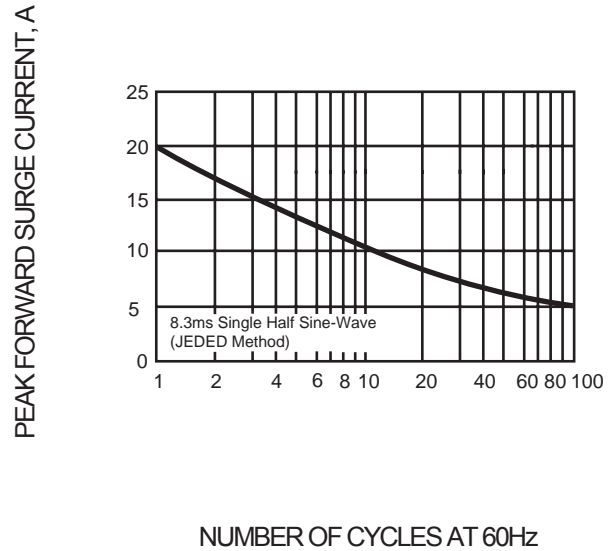


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

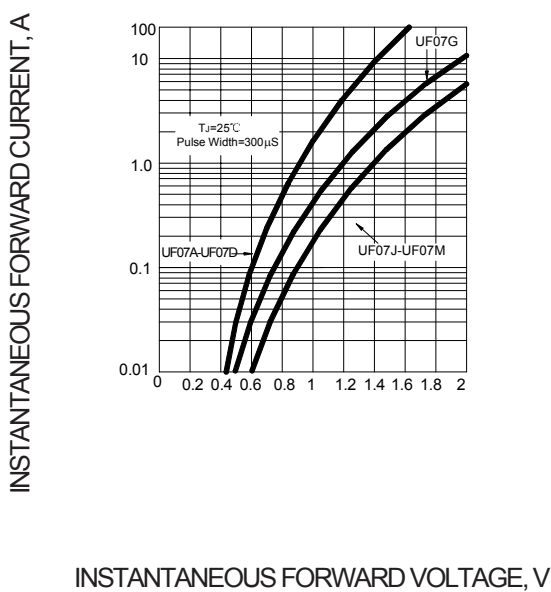


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

