

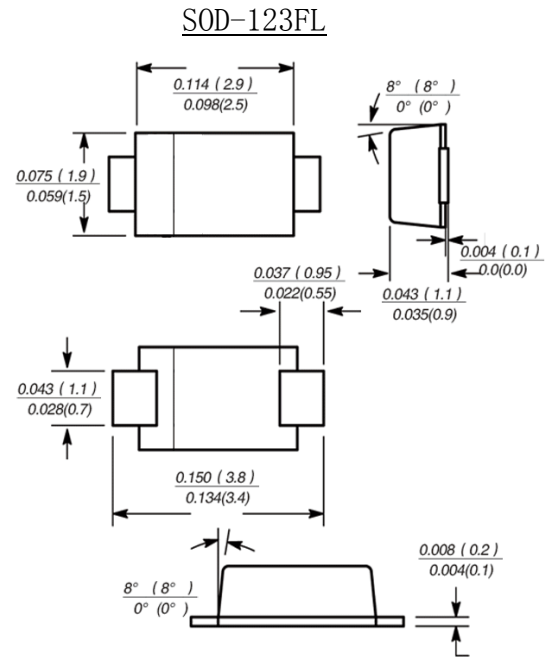
1.0A SURFACE MOUNT HIGH EFFICIENCY RECTIFIER

Features

- Glass passivated device
- Ideal for surface mouted applications
- Low reverse leakage
- Metallurgically bonded construction
- High temperature soldering guaranteed:
260 C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

Mechanical Data

- Terminal: : Plated axial leads, solderable per MIL-STD-750, Method 2026
- Case: : JEDEC SOD-123FL molded plastic body over passivated chip
- Polarity: : Color band denotes cathode end
- Mounting Position: Any



Dimensions in millimetre

Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbol	US1AL UA	US1BL UB	US1DL UD	US1GL UG	US1JL UJ	US1KL UK	US1ML UM	UNIT
Maximum repetitive 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 output rectified current	I (AV)	1.0							A
Peak forward surge current 8.3ms single sine-wave superimposed on rated load(JEDEC Method)	I _{FSM}	25							A
Maximum instantaneous forward voltage drop per diode @1.0A	V _F	1.0			1.4	1.7			V
Maximum DC reverse current at TA=25℃ rated DC blocking voltage per leg TA=100℃	I _R	5.0 100							uA
Maximum reverse recovery time (NOTE 1)	trr	50				75			ns
Typical thermal resistance	R _{θJA}	180							K/W
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150							℃

Note: 1. Measured with $I_F=0.5A$, $I_R=1A$, $I_{rr}=0.25A$.

US1AL-US1ML

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AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE

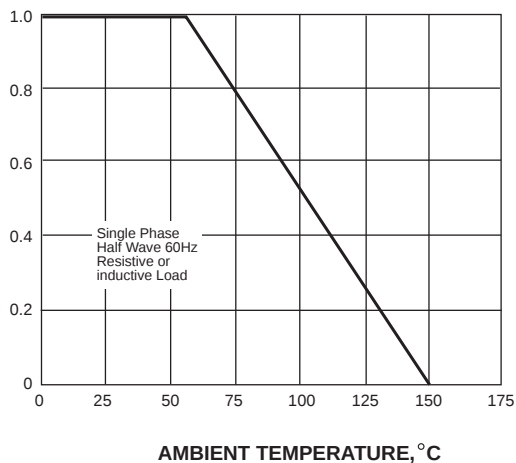


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

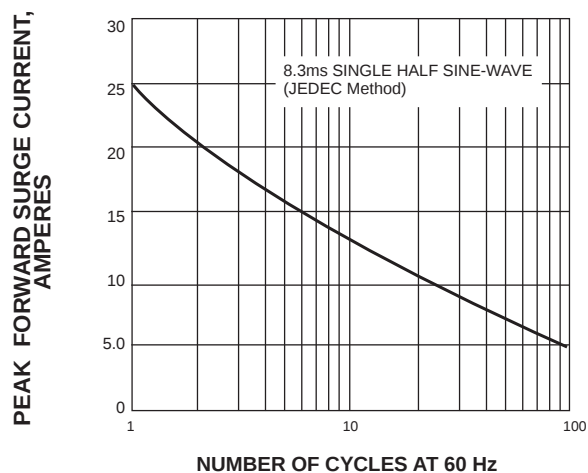


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

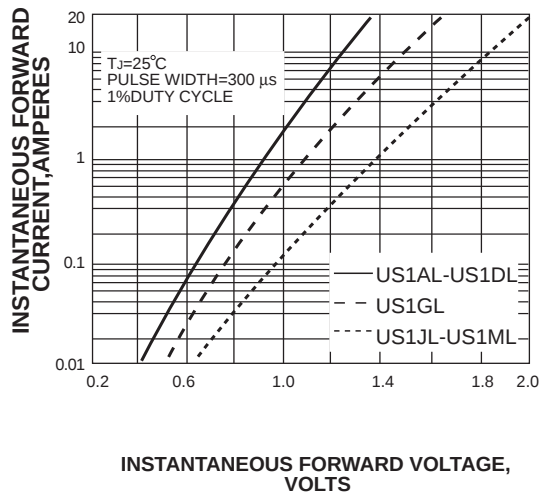


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

