

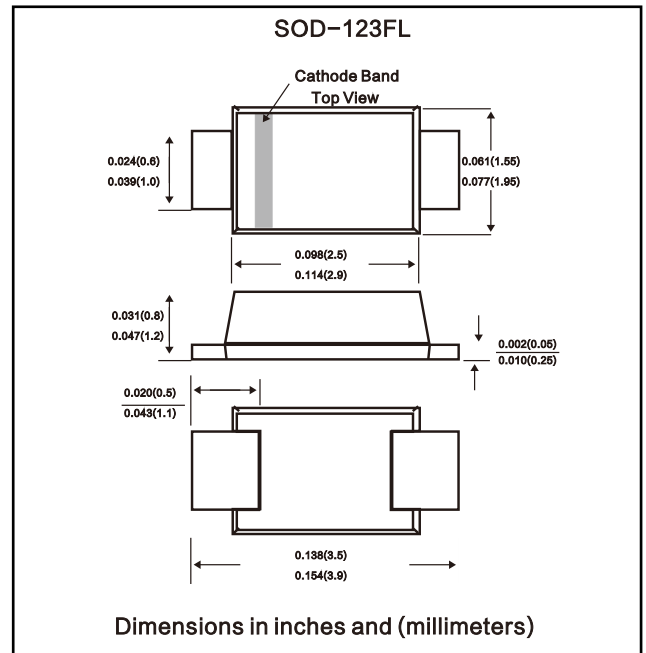
SURFACE MOUNT RECTIFIER

FEATURES

- Glass passivated device
- Ideal for surface mouted applications
- Low leakage current
- Metallurgically bonded construction
- High temperature soldering:
/10 seconds at terminals

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: 0.0008 ounces, 0.022 gram
 Mounting position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	Symbol	US1001FL	US1002FL	US1004FL	US1006FL	US1008FL	Units
Maximum repetitive peak reverse voltage	V_{RRM}	100	200	400	600	800	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	V
Maximum DC blocking voltage	V_{DC}	100	200	400	600	800	V
Maximum average forward rectified current $T_{\theta J}=65^{\circ}C$ $T_A=45^{\circ}C$	$I_{F(AV)}$	1.4 0.5					A
Maximum DC reverse current at rated DC blocking voltage $T_A=25^{\circ}C$ $T_A=125^{\circ}C$	I_R	10 50					μA
Operating junction and storage temperature range	T_J, T_{STG}	-50 TO + 150					$^{\circ}C$

ELECTRICAL CHARACTERISTICS

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

PARAMETER	Symbol	US1001FL	US1002FL	US1004FL	US1006FL	US1008FL	Units
Maximum instantaneous forward voltage 0.7A	V_F	1		1.4	1.7		V
Maximum DC reverse current at rated DC blocking voltage $T_A=25^{\circ}C$ $T_A=125^{\circ}C$	I_R	10 50					μA
Reverse recovery time at $I_F=0.5A, I_R=1A, I_{tr}=0.25A$	t_{rr}	50			100		ns
Typical capacitance 4V, 1MHz	C_j	9					pF

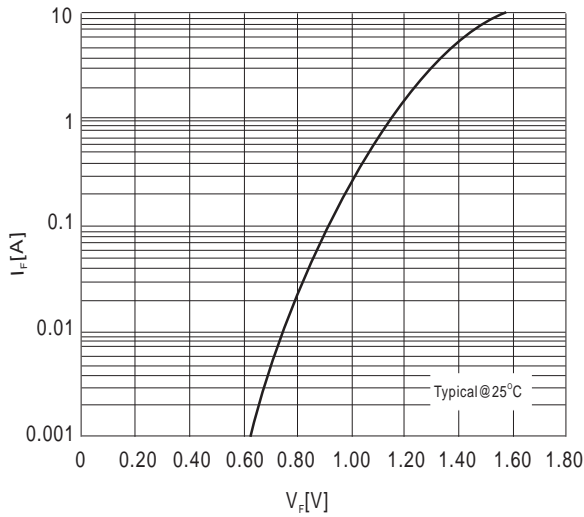


Fig.1-TYPICAL FORWARD CHARACTERISTICS

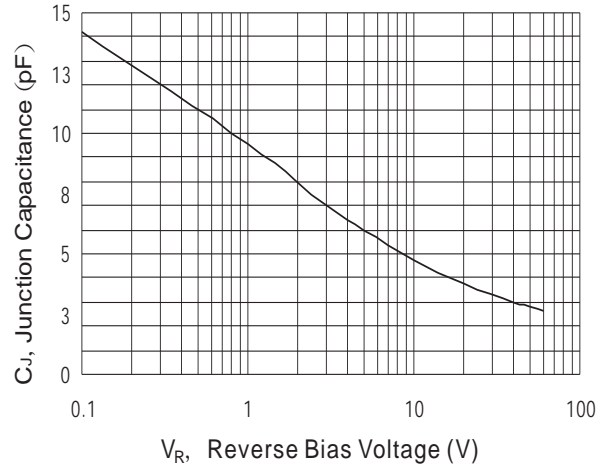


Fig.2-TYPICAL JUNCTION CAPACITANCE

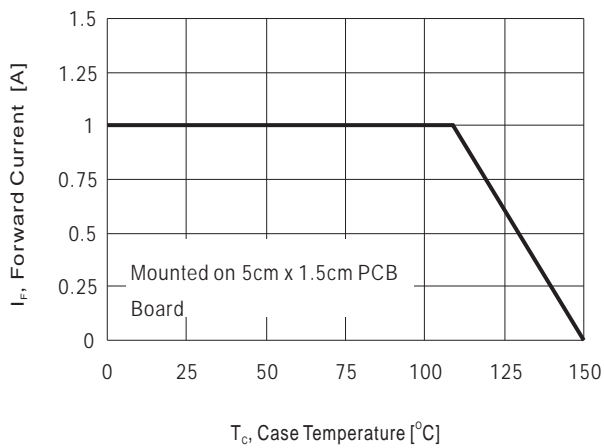


Fig.3-FORWARD CURRENT DERATING CURVE

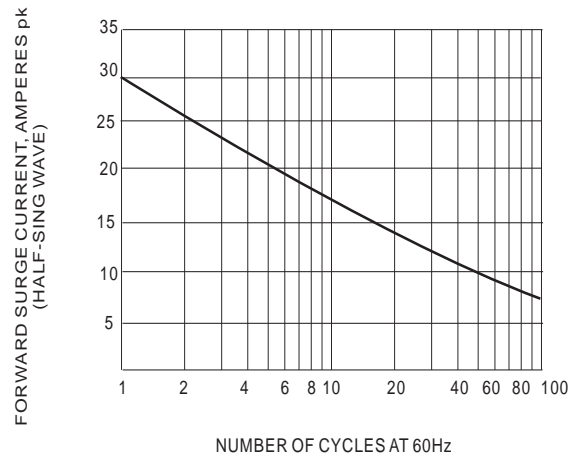


Fig.4-MAXIMUM NON-REPEITIVE SURGE CURRENT