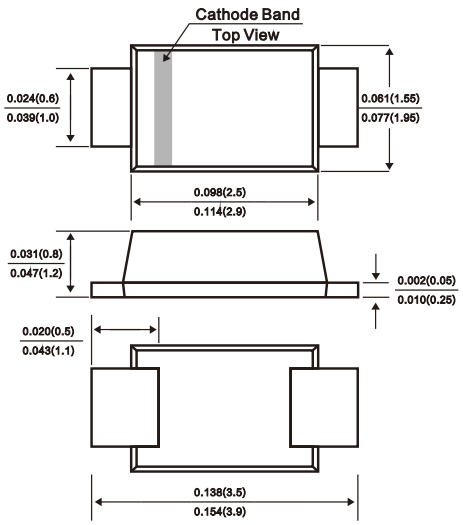
US1001FL THRU US1008FL

SURFACE MOUNT RECTIFIER

FEATURES

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

SOD−123FL



Dimensions in inches and (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: 0.0008 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 repetitve 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_{tp}=65°C T_A=45°C	$I_{F(AV)}$	1.4 0.5					A
Maximum DC reverse current at rated DC blocking voltage	T_A=25°C T_A=125°C	I_R	10 50					μA
Operating junction and storage temperature range		T_J ,T_{STG}	-50 TO + 150					°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°C T_A=125°C	I_R	10 50					μA
Reverse recovery time at I_F=0.5A,I_R=1A, I_{rr}=0.25A		t_{rr}	50			100		ns
Typical capacitance	4V,1MHz	C_J	9					pF

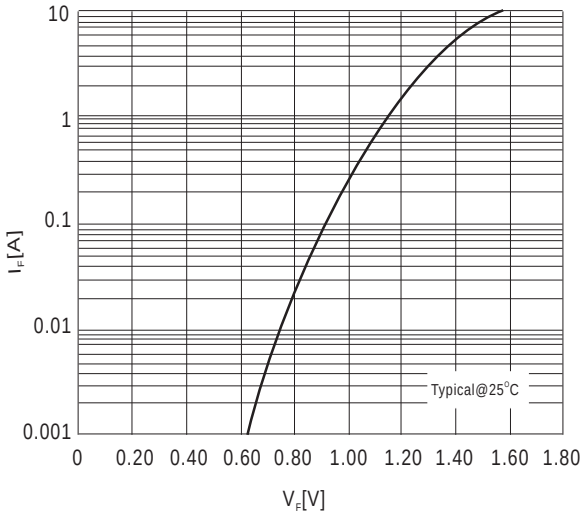


Fig.1-TYPICAL FORWARD CHARACTERISTICS

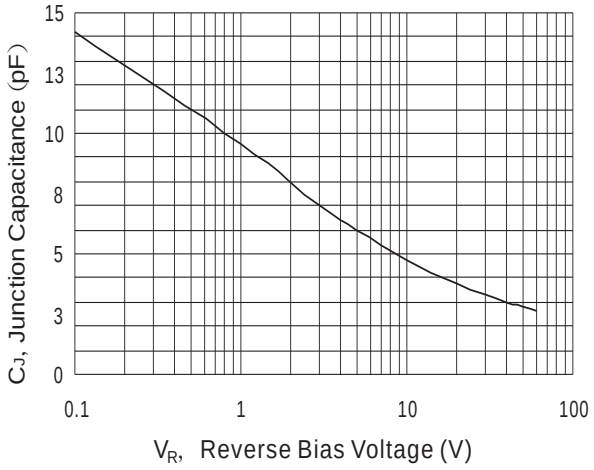


Fig.2-TYPICAL JUNCTION CAPACITANCE

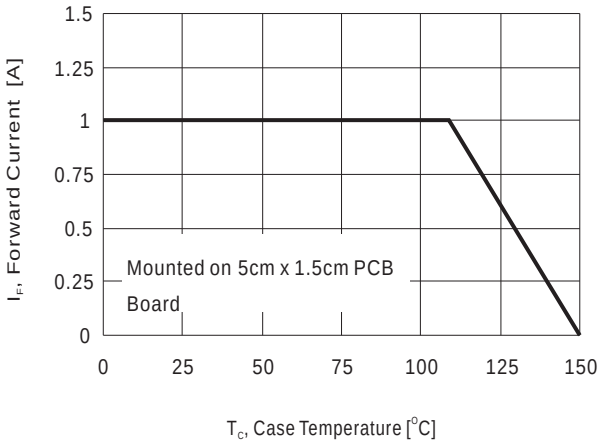


Fig.3-FORWARD CURRENT DERATING CURVE

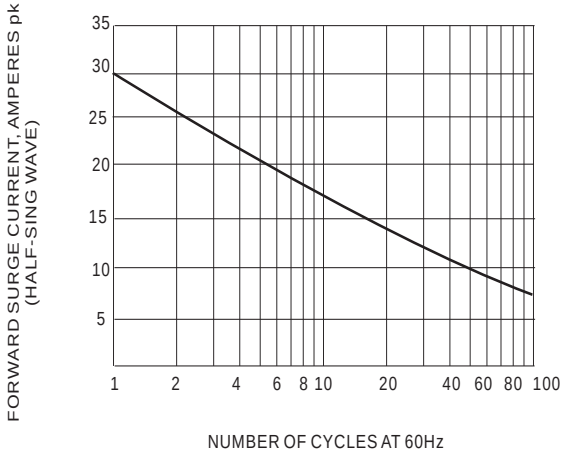


Fig.4-MAXIMUM NON-REPEITIVE SURGE CURRENT