

Ultra Super Fast Recovery Diodes

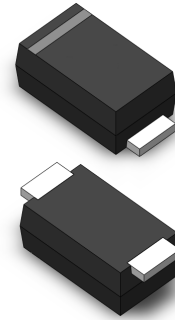
UF1001FL~UF1006FL
1A
100 to 600V
SOD-123FL

Features

- u For surface mounted applications
- u Low profile package
- u Glass Passivated Chip Junction
- u High efficiency
- u Lead free in comply with EU RoHS 2011/65/EU directive

Mechanical Data

- u Case: SOD-123FL
- u Terminals: Solderable per MIL-STD-750, Method 2026
- u Approx. Weight:15mg 0.00048oz


SOD-123FL

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 current derate by 20%.

Parameter		Symbol	UF1001FL	UF1002FL	UF1004FL	UF1006FL	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	100	200	400	600	V
Maximum RMS voltage		V_{RMS}	70	140	280	420	V
Maximum DC Blocking Voltage		V_{DC}	100	200	400	600	V
Maximum Average Forward Rectified Current at Ta = 65℃		I_{F(AV)}	1				A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)		I_{FSM}	25				A
Maximum Instantaneous Forward Voltage at 1 A		V_F	1.0		1.4	1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	Ta =25℃	I_R	5				μA
	Ta =125℃		100				
Maximum Reverse Recovery Time 1)		t_{rr}	50			75	ns
Typical Thermal Resistance		RθJA	180				℃/W
Operating and Storage Temperature Range		T_J,T_{STG}	-55 ~ +150				℃

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

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Characteristic Curves

Fig1. Forward Current Derating Curve

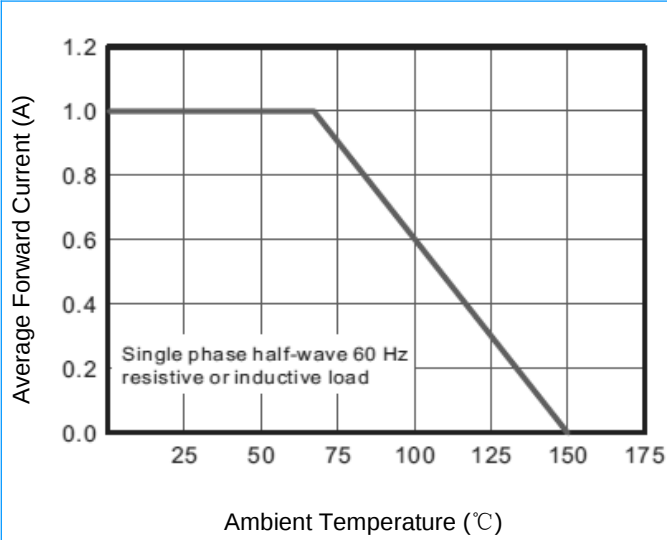


Fig2. Typical Reverse Characteristics

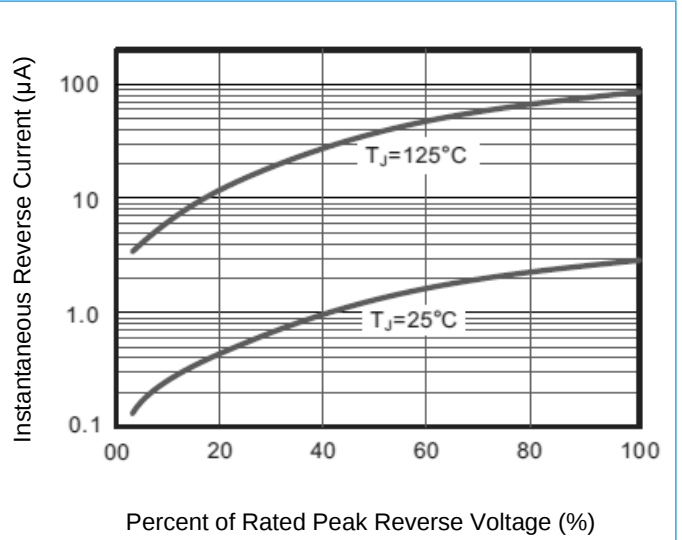


Fig3. Typical Instantaneous Forward Characteristics

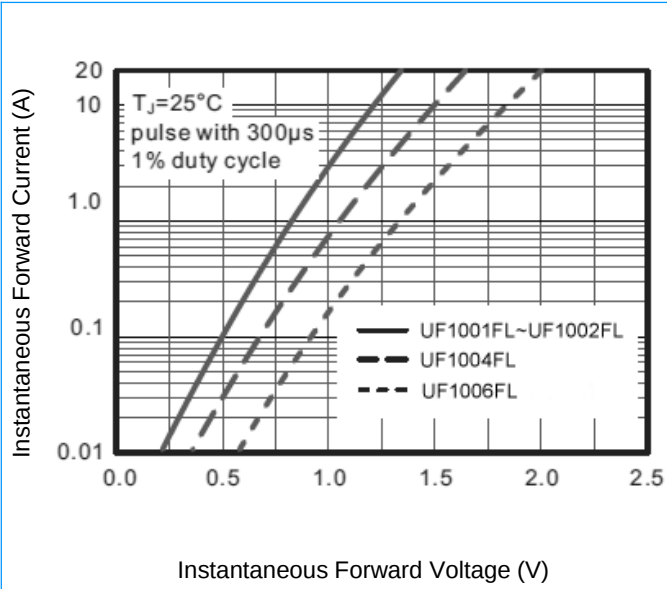
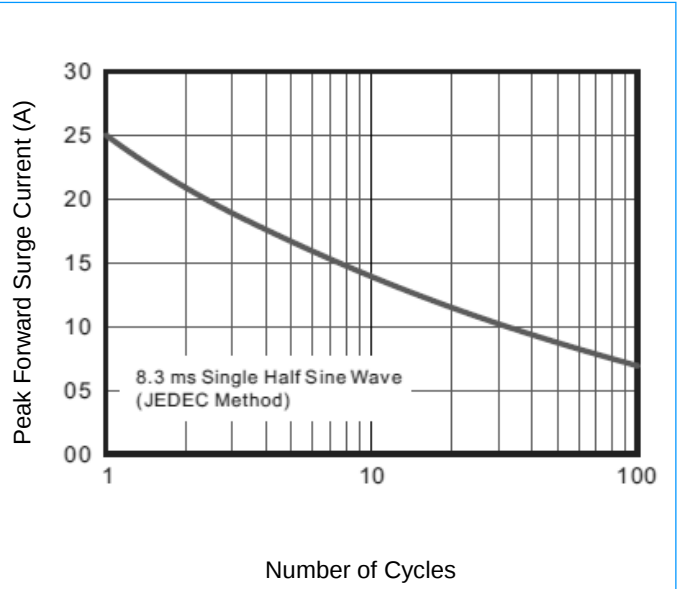


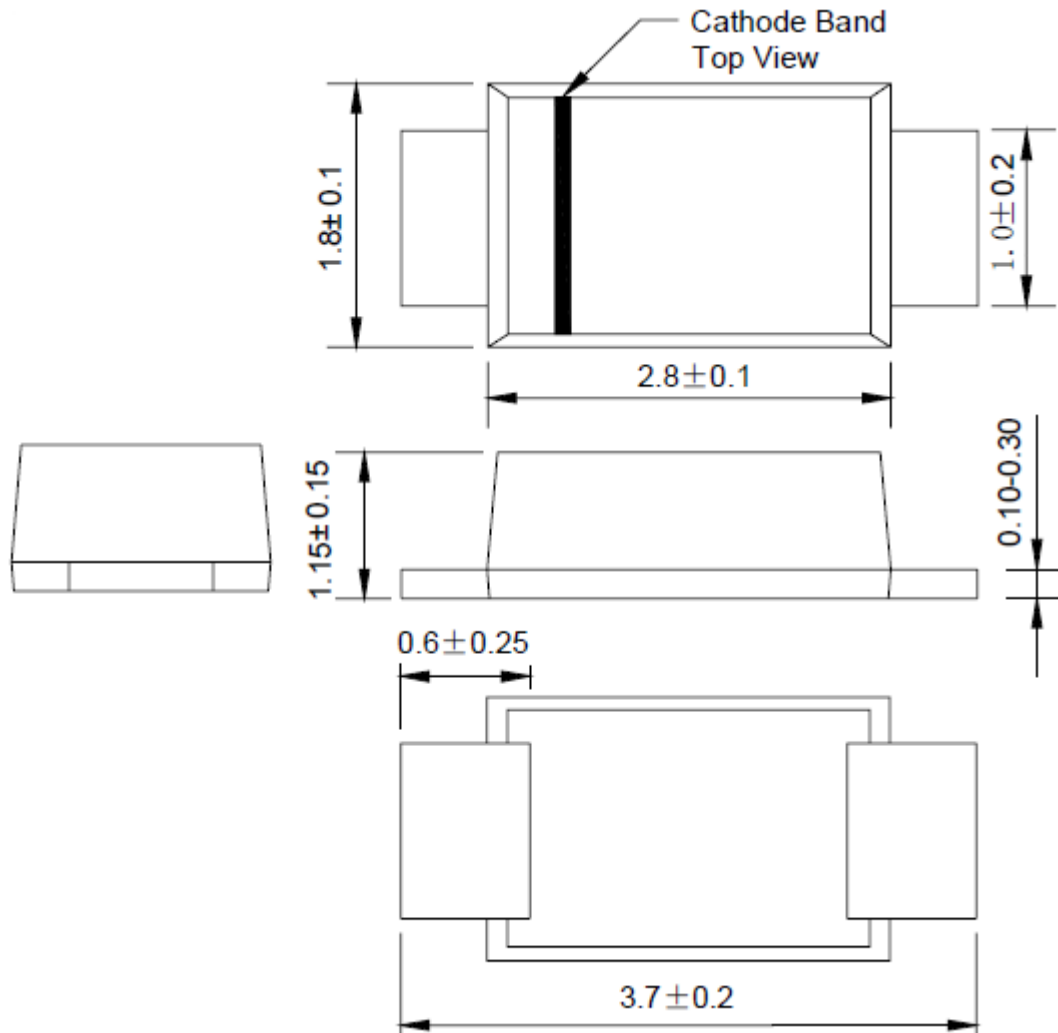
Fig4. Maximum Non-Repetitive Peak Forward Surge Current



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SOD-123FL Package Outline



Dimensions in millimeters

Packaging Information

Part Number	Component Package	Quantity
UF1001FL~UF1006FL	SOD-123FL	3000 PCS/REEL