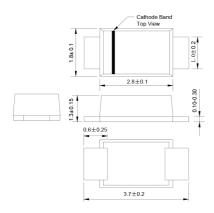


F1A THRU F1M

SUFACE MOUNT FAST RECOVERY RECTIFIER
Reverse Voltage - 50 to 1000 Volts Forward Current -1.0Ampere

SOD-123FL



Dimensions in millimeters

FEATURES

- ◆ Glass passivated device
- ◆ Ideal for surface mouted applications
- ◆ Low reverse leakage
- ◆ Metallurgically bonded construction
- → High temperature soldering guaranteed: 250°C/10 seconds,0.375"(9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC SOD-123FL molded plastic body over passivated chip Terminals: Plated axial leads, solderable per MIL-STD-750.

Method 2026

Polarity: Color band denotes cathode end

Mounting Position : Any

Weight: 0.0007 ounce, 0.02 grams

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 current derate by 20%.

PARAMETERS	SYMBOLS	F1A	F1B	F1D	F1G	F1J	F1K	F1M	UNITS
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current at Ta=65°C (NOTE 1)	I(AV)	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) TL=25°C	Ігѕм	25.0							Amps
Maximum instantaneous forward voltage at 1.0A	VF	1.3							Volts
Maximum DC reverse current TA=25°C at rated DC blocking voltage TA=125°C	lR	5.0 50.0							μА
Maximum reverse recovery time (NOTE 2)	trr	150 250 500					ns		
Typical junction capacitance (NOTE 3)	Cı	15							pF
Operating junction and storage temperature range	ТЈ, Тѕтс	-50 to +150							°C

Note: 1.Averaged over any 20ms period.

2.Measured with IF=0.5A, IR=1A, Irr=0.25A.

3. Measured at 1MHz and applied reverse voltage of 4.0V D.C.



RATINGS AND CHARACTERISTIC CURVES F1A THRU F1M

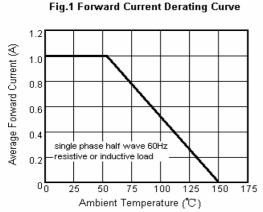


Fig.3 Typical Instantaneous Forward Characteristics

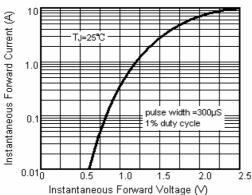


Fig.5 Typical Junction Capacitance

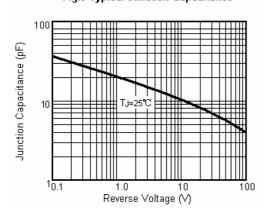


Fig.2 Maximum Non-Repetitive Peak
Forward Surge Current

30
25
20
20
30
30
40
25
10
8.3mS single half sine-wave (JEDEC Method)

Number of Cycles

Fig.4 Typical Reverse Characteristics

