

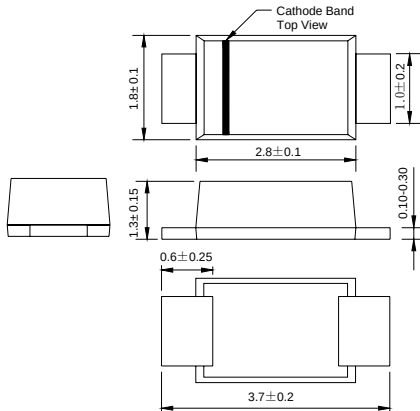


DFR0.3A THRU DFR0.3M

SURFACE MOUNT FAST RECOVERY RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current -0.3Ampere

SOD-123FL



Dimensions in millimeters

FEATURES

- ◆ Glass passivated device
- ◆ Ideal for surface mounted 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%.

MDD Catalog Number	SYMBOLS	DFR0.3A F03A	DFR0.3B F03B	DFR0.3D F03D	DFR0.3G F03G	DFR0.3J F03J	DFR0.3K F03K	DFR0.3M F03M	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current at TA=65°C (NOTE 1)	I _(AV)	0.3							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) TL=25°C	I _{FSM}	10.0							Amps
Maximum instantaneous forward voltage at 0.3A	V _F	1.3							Volts
Maximum DC reverse current TA=25°C at rated DC blocking voltage TA=125°C	I _R	5.0 50.0							μA
Maximum reverse recovery time (NOTE 2)	trr	150				250	500		ns
Typical junction capacitance (NOTE 3)	Cj	15							pF
Operating junction and storage temperature range	Tj,Tstg	-50 to +150							°C

Note: 1. Averaged over any 20ms period.

2. Measured with $I_F=0.3\text{A}$, $I_R=1\text{A}$, $I_{rr}=0.25\text{A}$.

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

MDD ELECTRONIC

RATINGS AND CHARACTERISTIC CURVES DFR0.3A THRU DFR0.3M

Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig.1 Forward Current Derating Curve

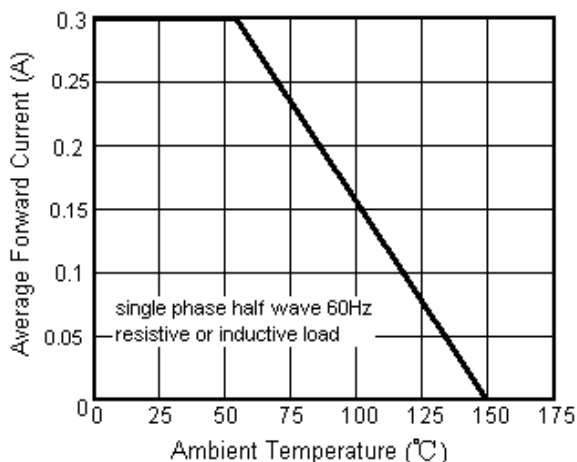


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

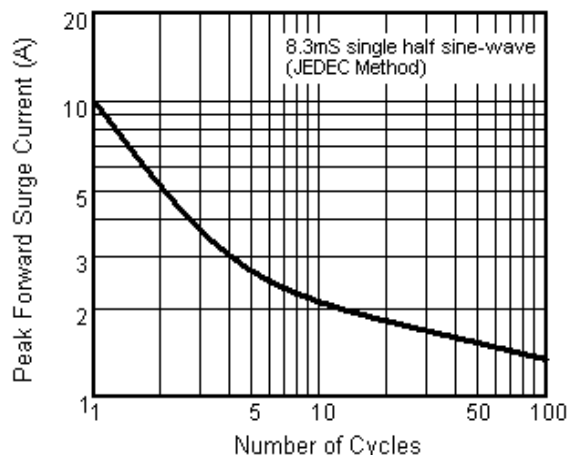


Fig.3 Typical Instantaneous Forward Characteristics

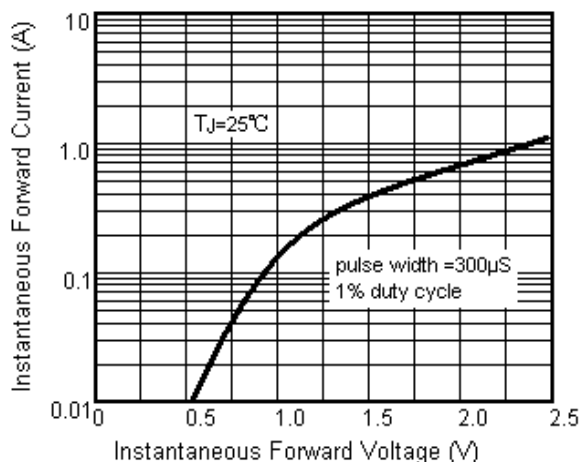


Fig.4 Typical Reverse Characteristics

