

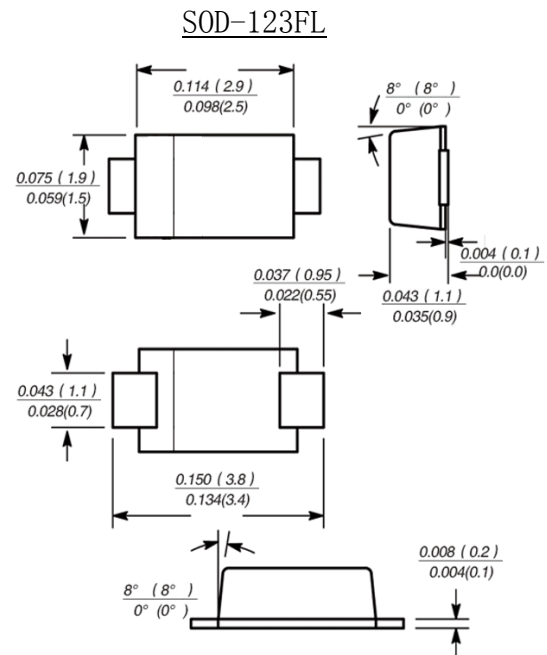
### 1.0A SURFACE MOUNT GENERAL PURPOSE SILICON RECTIFIER

#### Features

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

#### Mechanical Data

- Terminal: : Plated axial leads, solderable per MIL-STD-750, Method 2026
- Case: : JEDEC SOD-123FL molded plastic body over passivated chip
- Polarity: : Color band denotes cathode end
- Mounting Position: Any



Dimensions in millimetre

#### Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbol	DSR1A S1A	DSR1B S1B	DSR1D S1D	DSR1G S1G	DSR1J S1J	DSR1K S1K	DSR1M S1M	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average forward output rectified current Ta=65°C (NOTE 1)	I (AV)	1.0							A
Peak forward surge current 8.3ms single sine-wave superimposed on rated load (JEDEC Method) TL=25°C	IFSM	25							A
Maximum instantaneous forward voltage drop per diode @1.0A	VF	1.1							V
Maximum DC reverse current at TA=25°C rated DC blocking voltage per leg TA=125°C	IR	10.0 50.0							uA
Typical junction capacitance (NOTE 2)	CJ	4							pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	180							K/W
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150							°C

**Note:** 1. Averaged over any 20ms period.

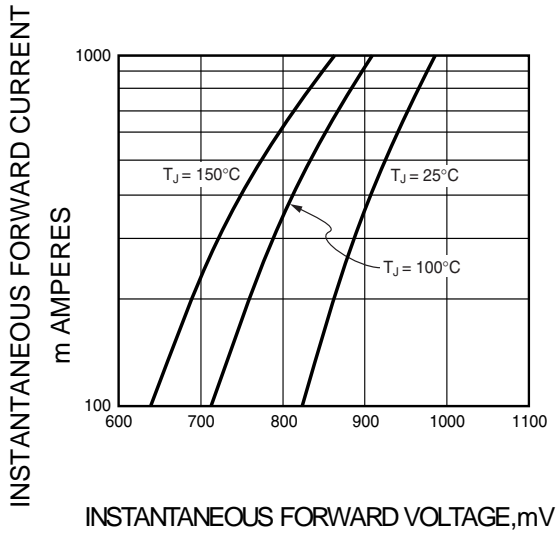
2. Measured at 1MHZ and applied reverse voltage of 4.0V D.C.

3. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

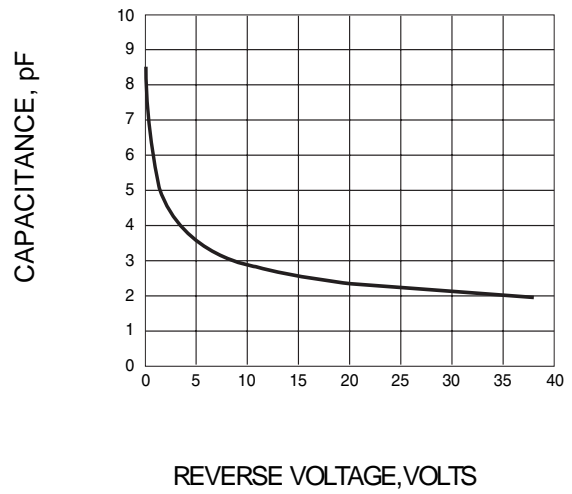
# DSR1A-DSR1M

1.0A SURFACE MOUNT GENERAL PURPOSE SILICON RECTIFIER

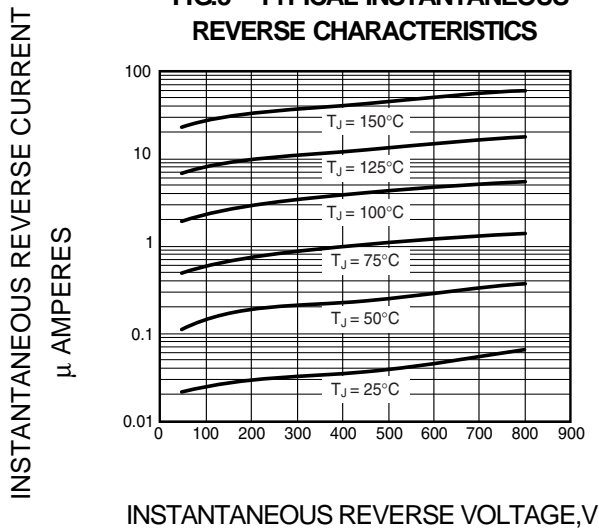
**FIG.1 – TYPICAL FORWARD CHARACTERISTIC**



**FIG.2 – TYPICAL JUNCTION CAPACITANCE**



**FIG.3 – TYPICAL INSTANTANEOUS REVERSE CHARACTERISTICS**



**FIG.4 – FORWARD DERATING CURVE**

