



# DSR0.3A-DSR0.3M

## Surface Mount Standard Rectifiers

### Major Ratings and Characteristics

$I_{F(AV)}$	0.3 A
$V_{RRM}$	50 V to 1000 V
$I_{FSM}$	15 A
$I_R$	5 $\mu$ A
$V_F$	1.1 V
$T_j$ max.	150 °C

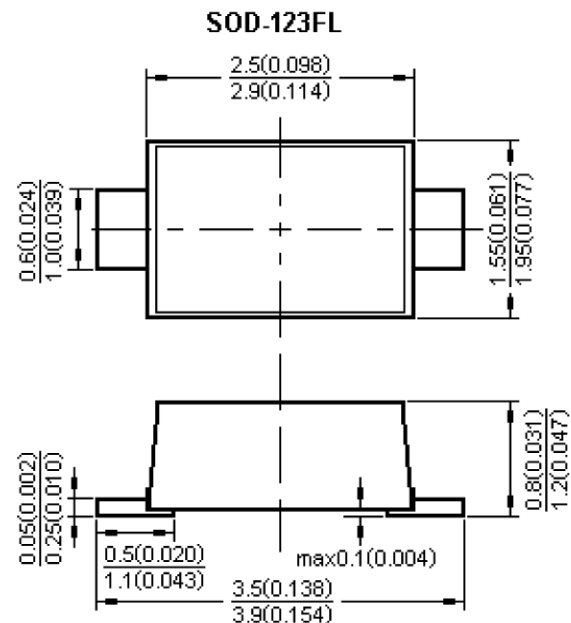


### Features

- Low profile space
- Ideal for automated placement
- Glass passivated chip junctions
- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High temperature soldering:  
260°C/10 seconds at terminals
- Component in accordance to  
RoHS 2002/95/1 and WEEE 2002/96/EC

### Mechanical Date

- **Case:** JEDEC SOD-123FL molded plastic body over glass passivated chip
- **Terminals:** Solder plated, solderable per J-STD-002B and JESD22-B102D
- **Polarity:** Laser band denotes cathode end
- **Weight:** 0.017gram



Dimensions in millimeters and (inches)

### Maximum Ratings & Thermal Characteristics & Electrical Characteristics

( $T_A = 25\text{ °C}$  unless otherwise noted)

	DSR-Symbol	0.3A	0.3B	0.3D	0.3G	0.3J	0.3K	0.3M	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 rectified current	$I_{F(AV)}$	0.3							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	15							A
Maximum instantaneous forward voltage at 0.3A	$V_F$	1.1							V
Maximum DC reverse current at Rated DC blocking voltage	$I_R$	5.0 50							$\mu$ A
Thermal resistance from junction to ambient (Note1)	$R_{\theta JA}$	220							°C/W
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150							°C

Note1: Mounted on FR-4 P.C.B. With 0.9x1.5 mm copper pad areas ( $\approx 35\text{ }\mu\text{m}$  thick)



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

Fig.1 Forward Current Derating Curve

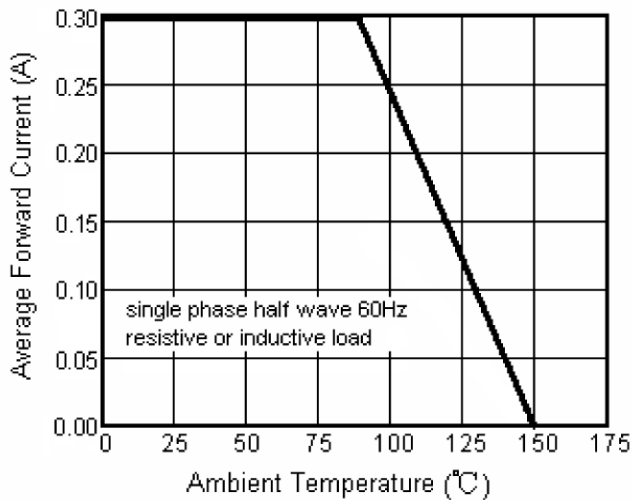


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

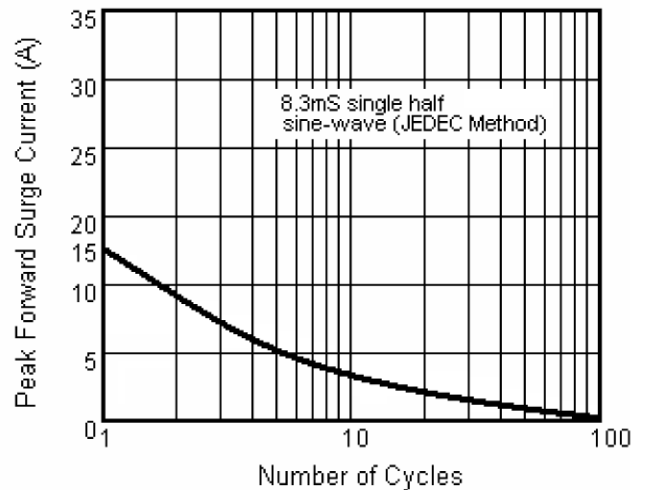


Fig.3 Typical Instantaneous Forward Characteristics

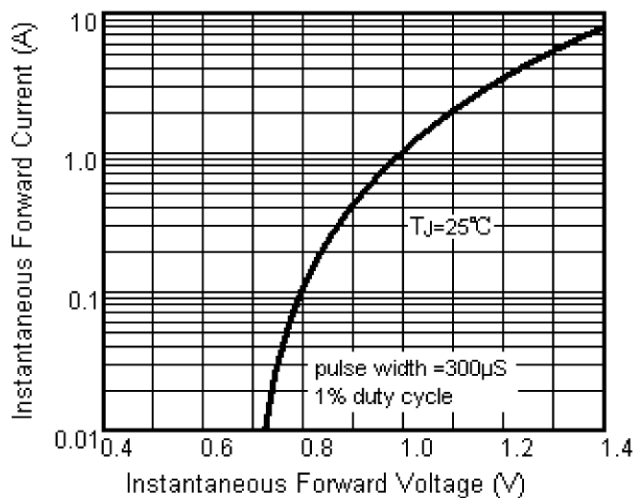


Fig.4 Typical Reverse Characteristics

