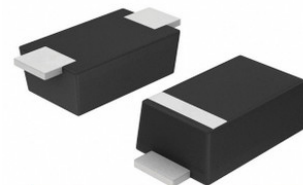


## Surface Mount General Purpose Silicon Rectifier in SOD-123FL

### Features

- Glass passivated device
- Ideal for surface mounted applications
- Low reverse leakage
- Metallurgically bonded construction



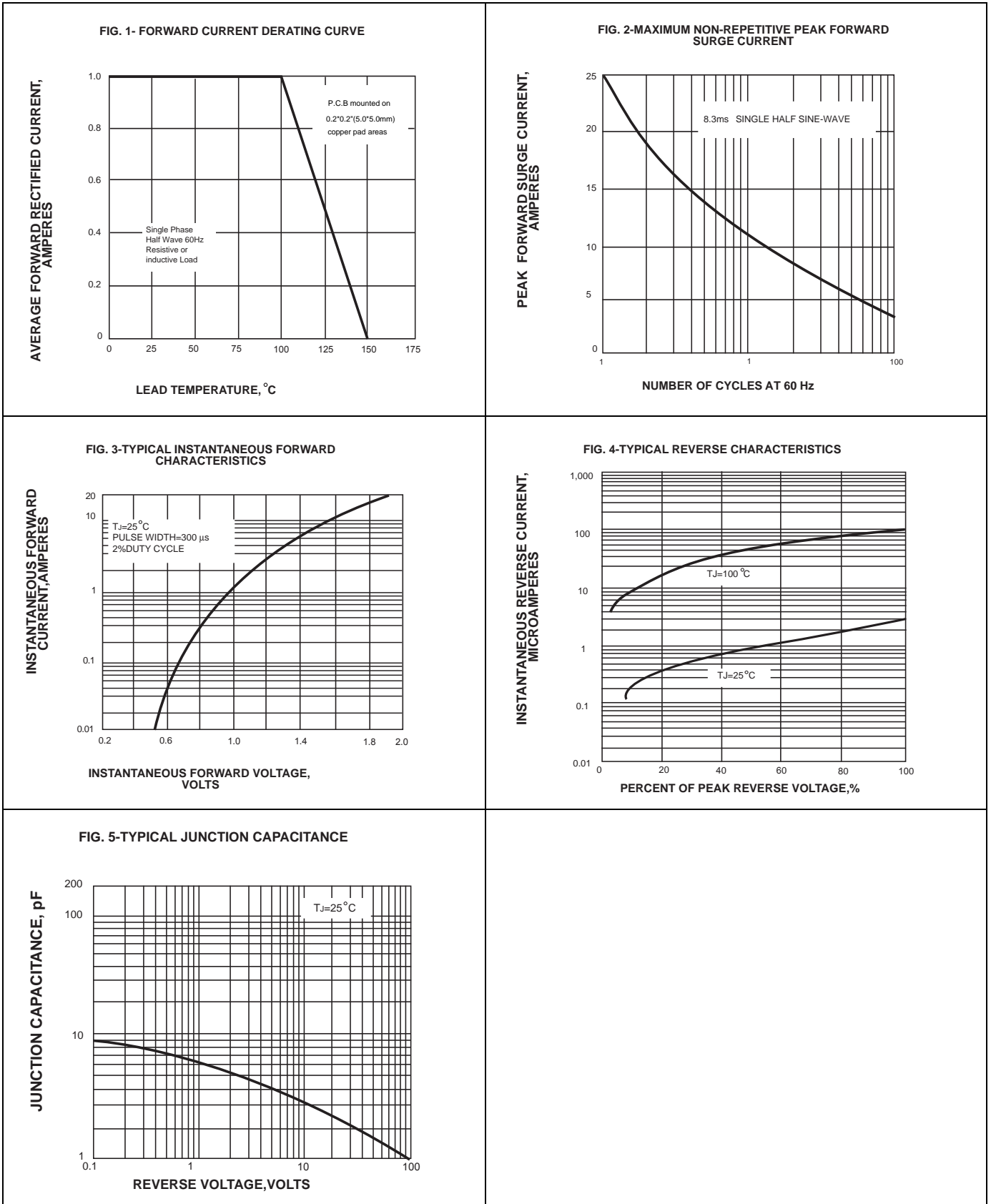
### Mechanical Data

- **Case:** JEDEC SOD-123FL molded plastic  
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:**  
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:  
260 °C/10 sec. at terminals

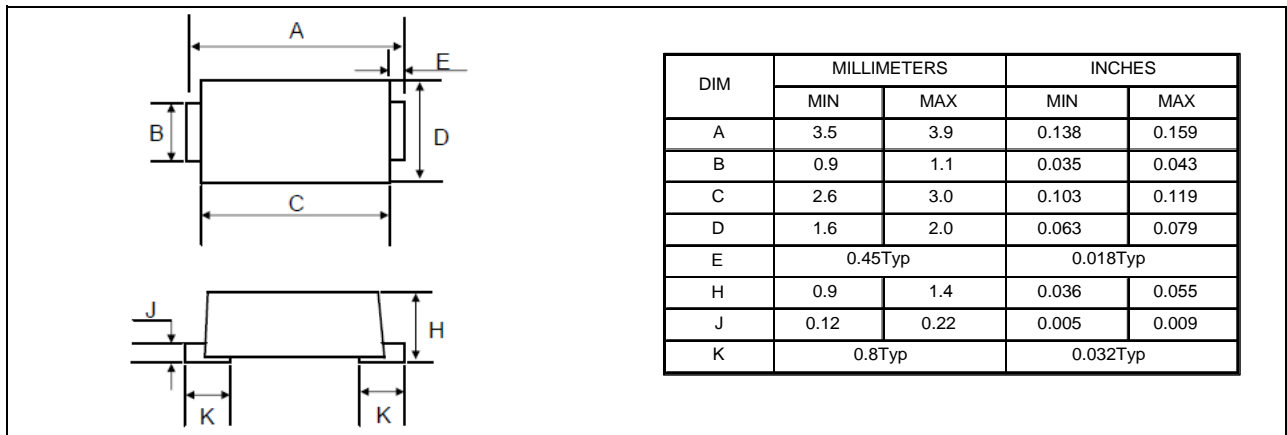
Maximum Ratings And Electrical Characteristics									
Ratings at 25 °C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.									
Parameter	Symbols	CS1AL	CS1BL	CS1DL	CS1GL	CS1JL	CS1KL	CS1ML	Units
Maximum 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 (See Fig.1)	$I_{(AV)}$	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	25.0							A
Maximum instantaneous forward voltage @ 1.0A DC	$V_F$	1.1							V
Maximum DC reverse current @ $T_J = 25^\circ\text{C}$ at rated DC blocking voltage @ $T_J = 125^\circ\text{C}$	$I_R$	10.0 50.0							$\mu\text{A}$
Typical junction capacitance (Note 2)	$C_J$	4							pF
Typical thermal resistance (Note 3)	$R_{\theta JA}$	95							$^\circ\text{C}/\text{W}$
Operating junction temperature range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

- Notes: 1. Averaged over any 20ms period.  
 2. Measured at 1.0MHz and applied reverse voltage of 4.0 V D.C.  
 3. PCB mounted on 0.2\*0.2" (5.0\*5.0mm) copper pad area.

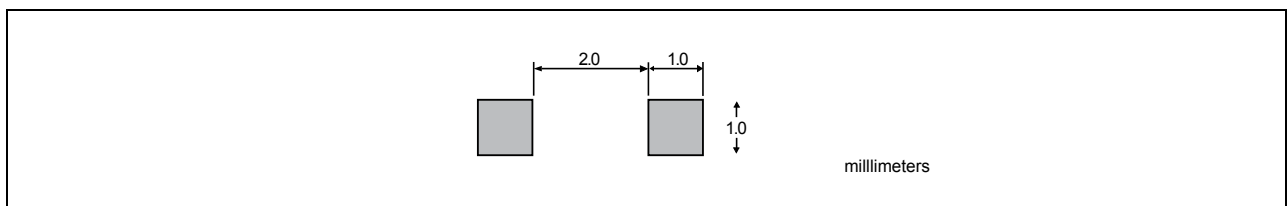
**Typical Characteristics** ( $T_{amb} = 25\text{ }^{\circ}\text{C}$  unless otherwise specified)



## Package Dimensions



## Pad Dimensions



## Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
CS1AL thur CS1ML	SOD-123FL	Tape and reel	3000pcs / reel	EIA STD RS-481

## Revision history

Date	Revision	Changes
23-May-2012	1.0	Initial release
21-May-2019	2.0	Update

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