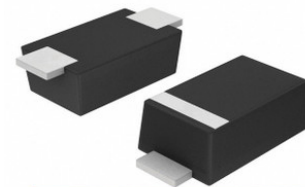


Surface Mount General Purpose Silicon Rectifier in SOD-123FL

Features

- Glass passivated device
- Ideal for surface mouted 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

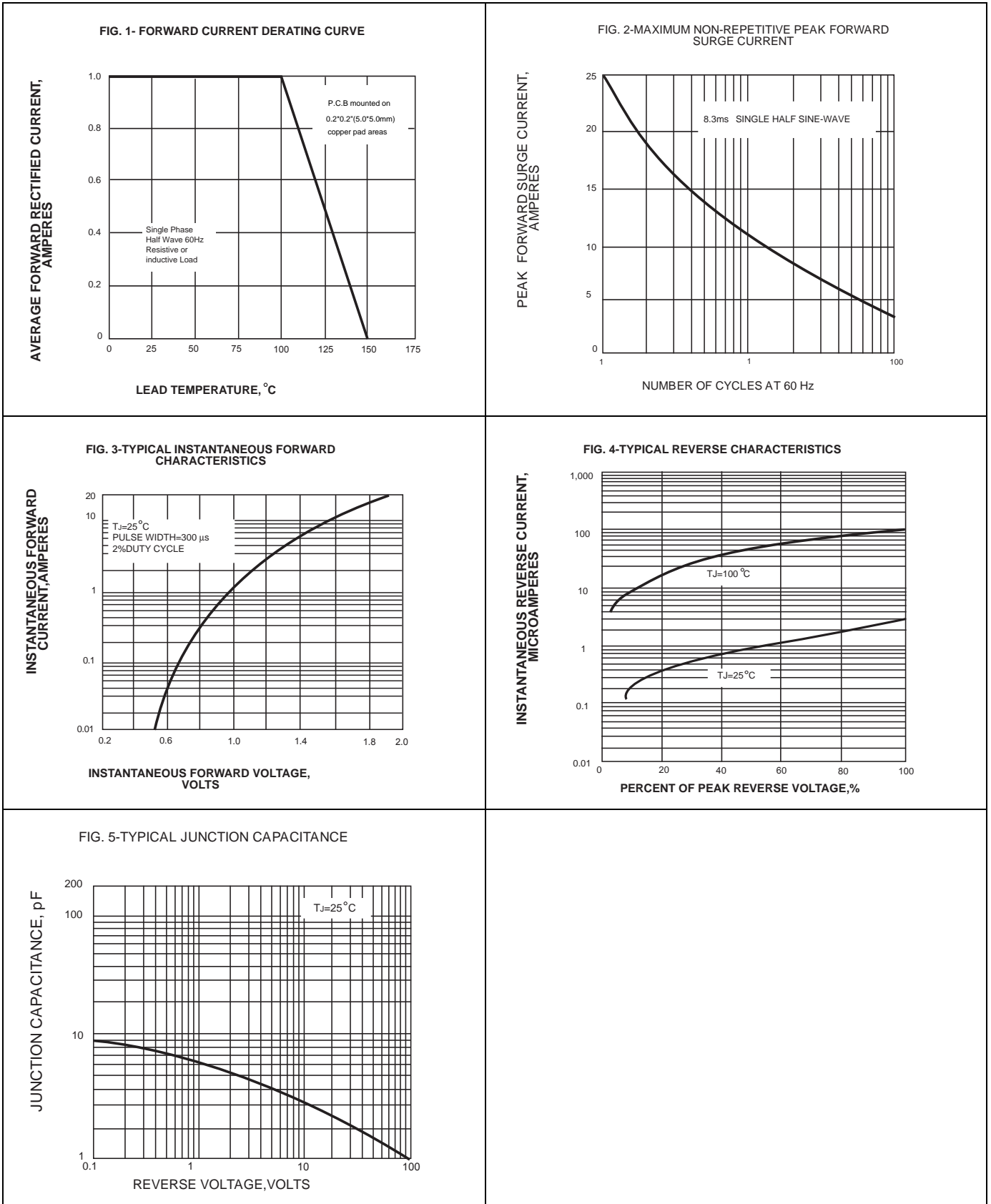
Maximum Ratings And Electrical Characteristics

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%.

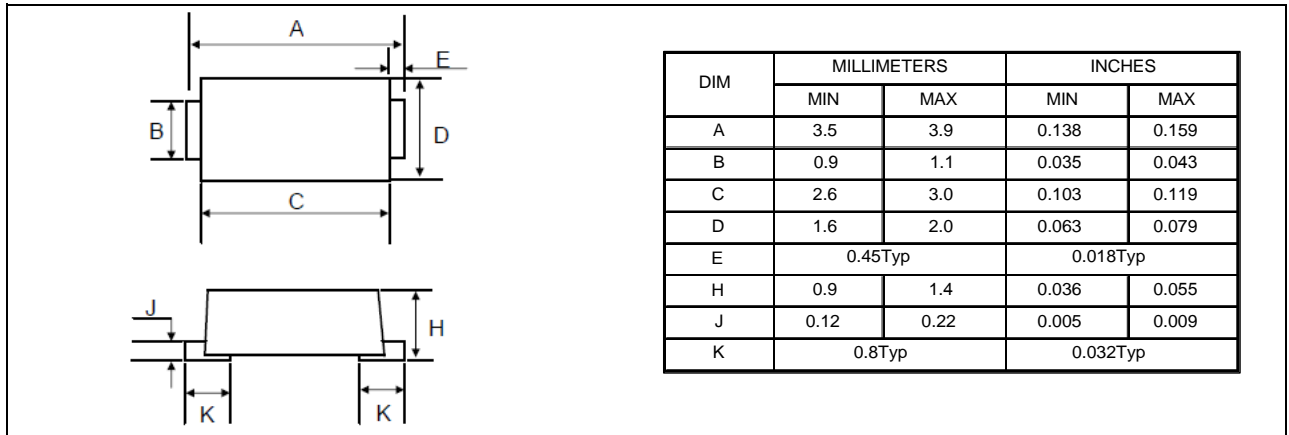
Parameter	Symbols	CS1AL	CS1BL	CS1DL	CS1GL	CS1JL	CS1KL	CS1ML	Units
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current (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							μA
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.

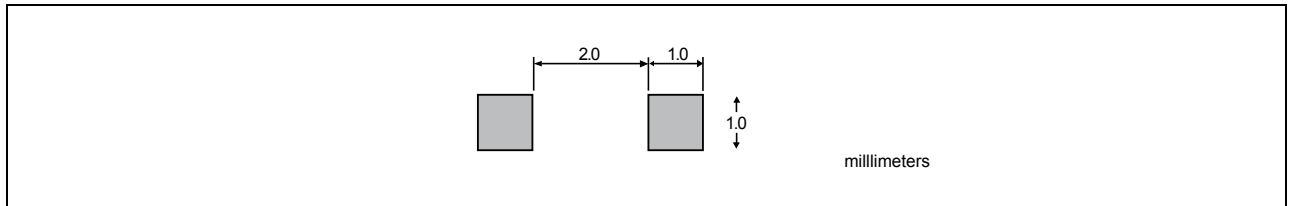
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



Package Dimensions



Pad Dimensions



Ordering information

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

Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

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