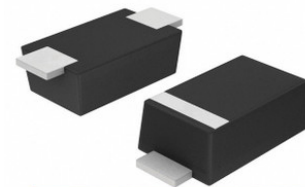


Surface Mount General-purpose Rectifiers in SOD-123FL

Features

- Low reverse leakage
- High forward surge capability
- High reliability



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

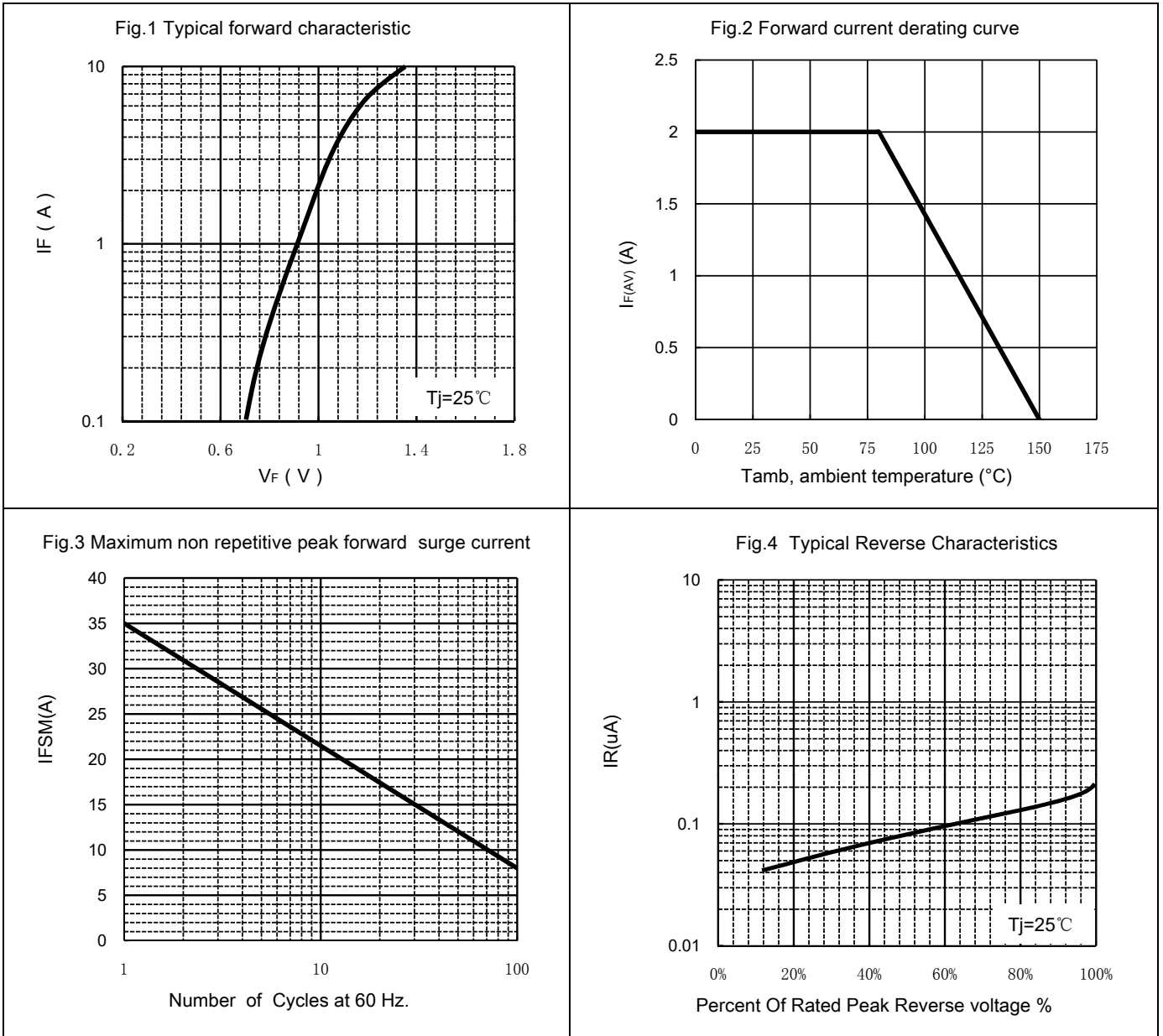
Maximum Ratings And Electrical Characteristics

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%.

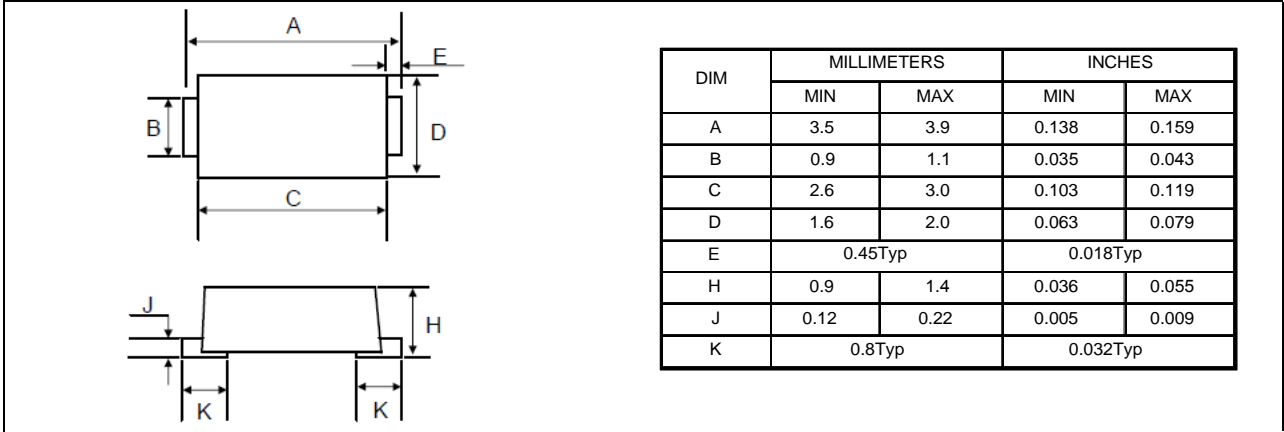
Parameter	Symbols	CS2AL	CS2BL	CS2DL	CS2GL	CS2JL	CS2KL	CS2ML	Units
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	$I_{F(AV)}$	2.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	35.0							A
Maximum instantaneous forward voltage @ 2.0A 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	5.0 100.0							uA
Typical junction capacitance (Note 3)	C_J	40							pF
Typical thermal resistance (Note 4)	$R_{\theta JA}$	180							°C/W
Operating junction temperature range	T_J	-55 to +150							°C
Storage temperature range	T_{STG}	-55 to +150							°C

Notes: 1. Thermal resistance from junction to ambient, PCB mounted.

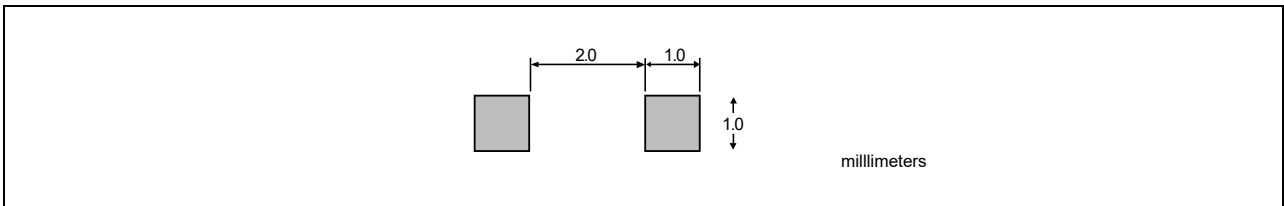
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



Package Dimensions



Pad Dimensions



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
CS2AL thru CS2ML	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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