



FEATURES

- For surface mounted applications
- Low-profile package
- Ideal for automated placement
- Low power loss, high efficiency
- High temperature soldering:
260 °C/10 seconds at terminals
- Lead (Pb)-free component
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

Mechanical Data

Case: JEDEC DO-219AB (SMF) Plastic case

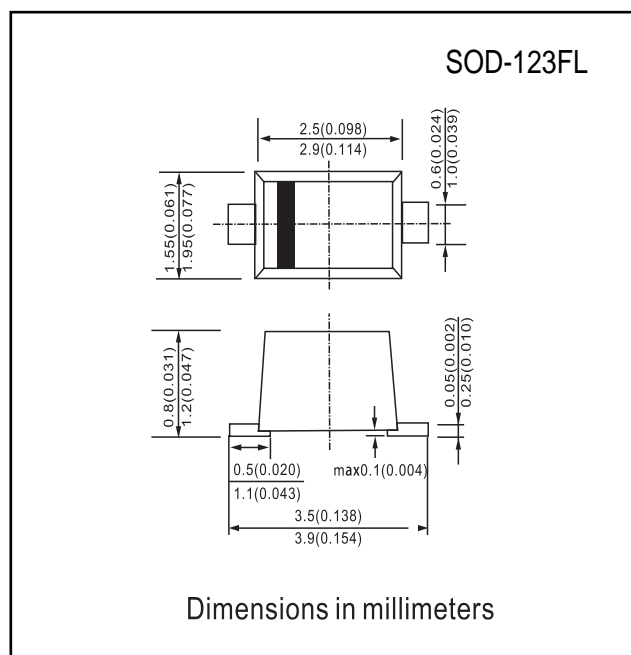
Polarity: Color band denotes cathode end

Weight: approx. 15 mg

Packaging codes-options:

G18 / 10 k per 13" reel (8 mm tape), 50 k/box

G08 / 3 k per 7" reel (8 mm tape), 30 k/box



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Absolute Maximum Ratings

T_{amb} = 25 °C, unless otherwise specified

Parameter	Test condition	Part	Symbol	Value	Unit
Maximum repetitive peak reverse voltage		SL02	V _{RRM}	20	V
		SL03	V _{RRM}	30	V
		SL04	V _{RRM}	40	V
Maximum RMS voltage		SL02	V _{RMS}	14	V
		SL03	V _{RMS}	21	V
		SL04	V _{RMS}	28	V

Parameter	Test condition	Part	Symbol	Value	Unit
Maximum DC blocking voltage		SL02	V _{DC}	20	V
		SL03	V _{DC}	30	V
		SL04	V _{DC}	40	V
Maximum average forward rectified current	T _{ip} = 109 °C		I _{F(AV)}	1.1	A
Peak forward surge current 8.3 ms single half sine-wave			I _{FSM}	40	A

Thermal Characteristics

T_{amb} = 25 °C, unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Thermal resistance junction to ambient air ²⁾		R _{thJA}	180	K/W
Maximum operating junction temperature		T _J	125	°C
Storage temperature range		T _{STG}	- 55 to 150	°C

¹⁾Mounted on epoxy substrate with 3 x 3 mm Cu pads (≥ 40 μm thick)



RATINGS AND CHARACTERISTIC CURVES SL02 THRU SL04

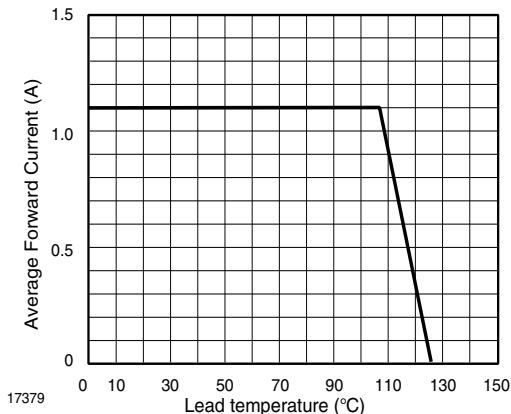


Figure 1. Forward Current Derating Curve

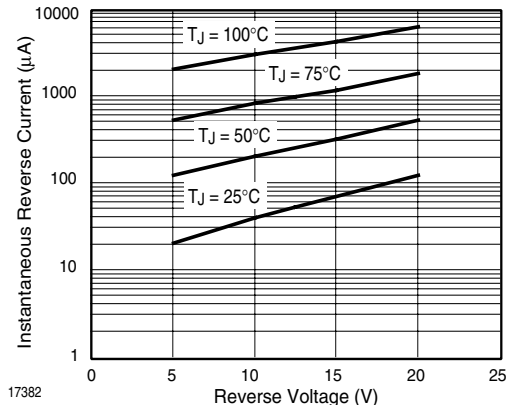


Figure 4. Typical Reverse Current Characteristics - SL02

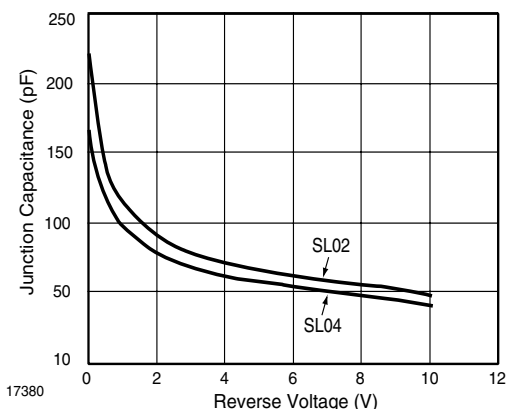


Figure 2. Typical Junction Capacitance

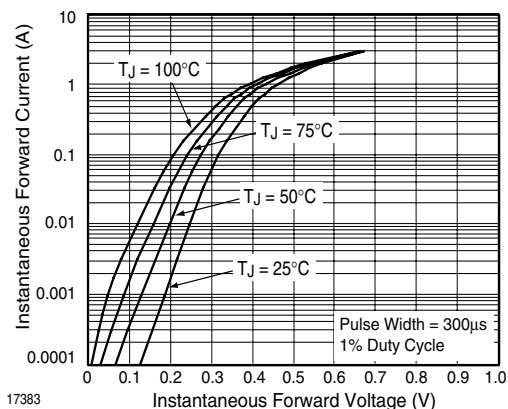


Figure 5. Typical Instantaneous Forward Characteristics - SL03

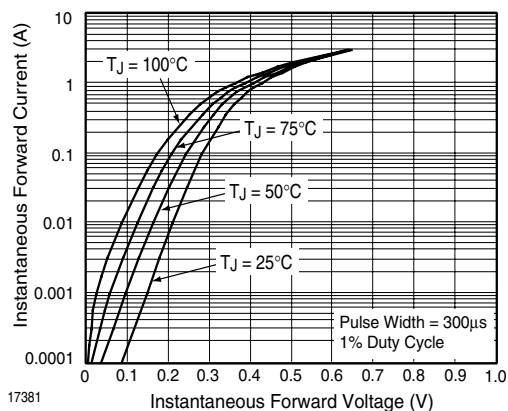


Figure 3. Typical Instantaneous Forward Characteristics - SL02

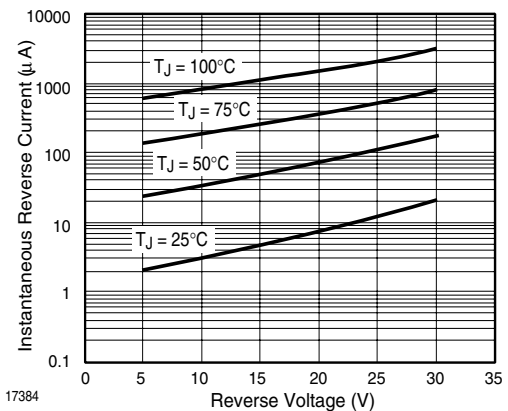


Figure 6. Typical Reverse Current Characteristics - SL03