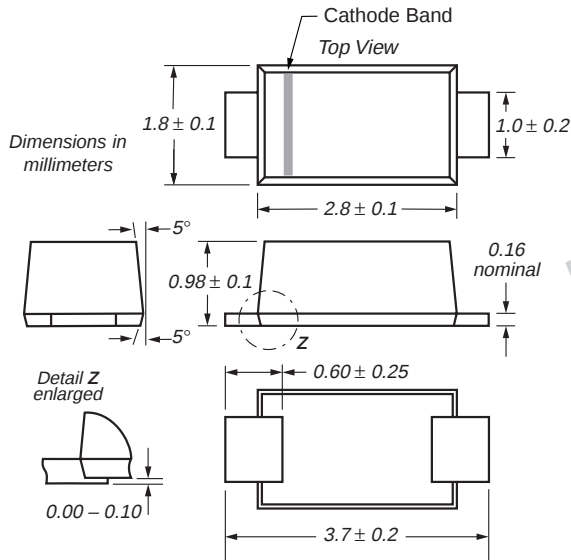
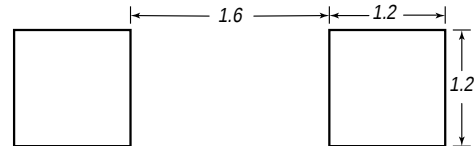



DO-219 (SMF)

Small Surface Mount Schottky Rectifier

Forward Current 1.1A
Reverse Voltage 20 to 40V

Mounting Pad Layout


Mechanical Data

Case: Low-profile plastic case

Polarity: Color band denotes cathode end

Weight: approx. 0.01g

Packaging codes-options:

G1-10K per 13" reel (8mm tape), 50K/box

G2-3K per 7" reel (8mm tape), 30K/box

Features

- For surface mounted applications
- Low-profile package
- Ideal for automated placement
- Low power loss, high efficiency
- High temperature soldering:
250°C/10 seconds at terminals

Maximum Ratings and Thermal Characteristics (T_C = 25°C unless otherwise noted)

Parameter	Symbol	SL02	SL03	SL04	Unit
Device marking code		S2	S3	S4	
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	V
Maximum RMS voltage	V _{RMS}	14	21	28	V
Maximum DC blocking voltage	V _{DC}	20	30	40	V
Maximum average forward rectified current, T _L = 109°C	I _{F(AV)}	1.1			A
Peak forward surge current 8.3ms single half sine-wave	I _{FSM}	40			A
Typical thermal resistance (on ceramic substrate) (on epoxy substrate)	R _{θJA}	55 188 ⁽²⁾			°C/W
Maximum Operating junction temperature	T _J	125			°C
Storage Temperature Range	T _S	-55 to 150			°C

Electrical Characteristics (T_C = 25°C unless otherwise noted)

Parameter	Symbol	SL02	SL03	SL04	Unit
Instantaneous forward voltage at 0.5A ⁽¹⁾	V _F	0.360	0.395	0.450	V
Typical Maximum		0.385	0.43	0.51	
Typical instantaneous forward voltage at 1.1A	V _F	0.420	0.450	0.500	V
Maximum DC reverse current at Rated DC blocking voltage	I _R	250	130	20	μA
T _A = 25°C T _A = 100°C		8.0	6.0	6.0	

Notes:

(1) Pulse test: 300μs pulse width, 1% duty cycle

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

Small Surface Mount Schottky Rectifier

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

**Fig. 1 - Forward Current
Derating Curve**

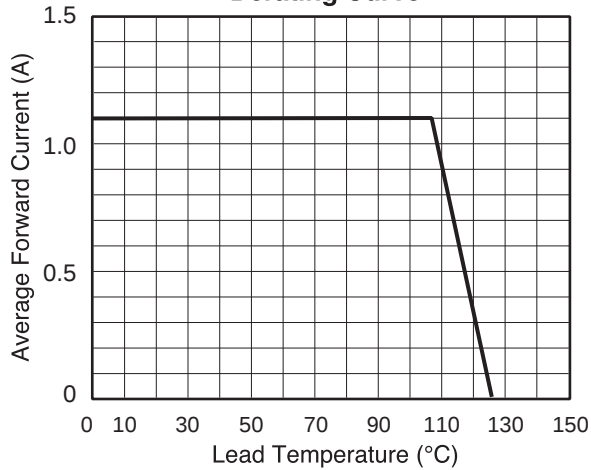
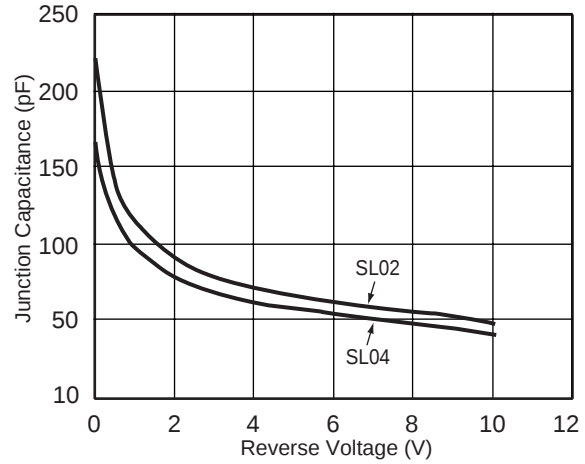
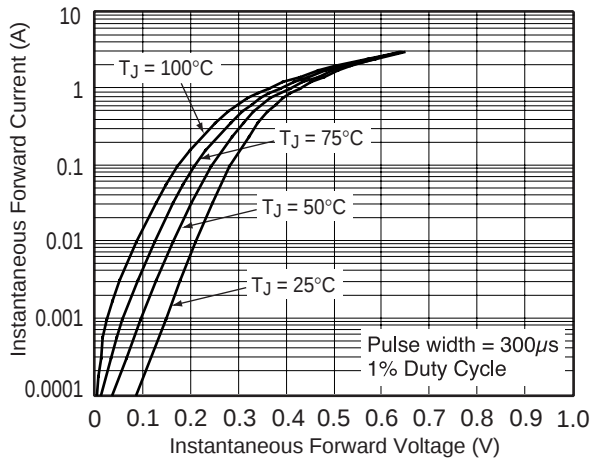


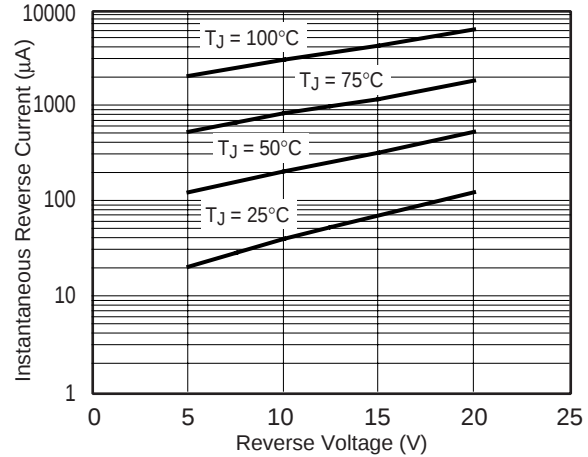
Fig. 2 - Typical Junction Capacitance



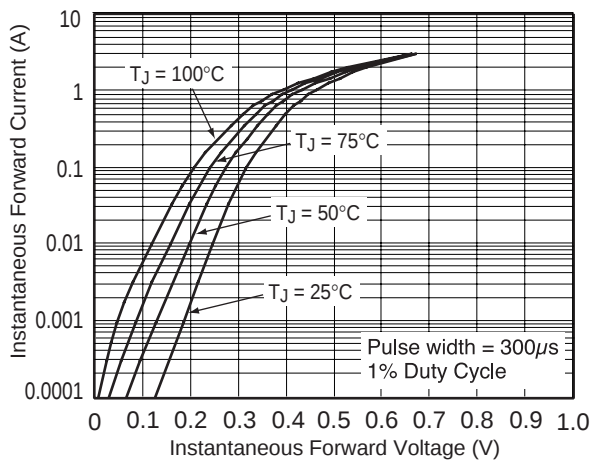
**Fig. 3 - Typical Instantaneous
Forward Characteristics - SL02**



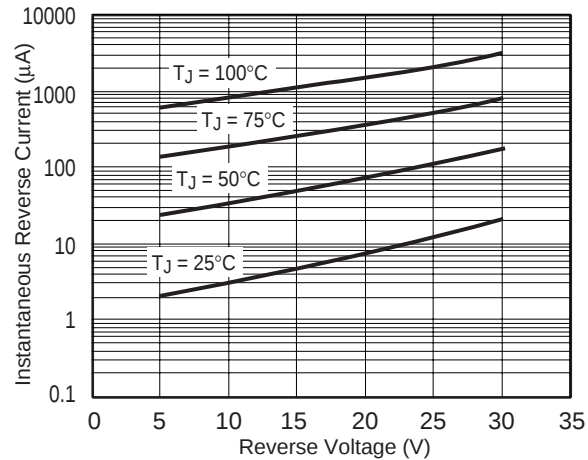
**Fig. 4 - Typical Reverse Current
Characteristics - SL02**



**Fig. 5 - Typical Instantaneous
Forward Characteristics - SL03**



**Fig. 6 - Typical Reverse Current
Characteristics - SL03**



Small Surface Mount Schottky Rectifier

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

Fig. 7 – Typical Instantaneous Forward Characteristics – SL04

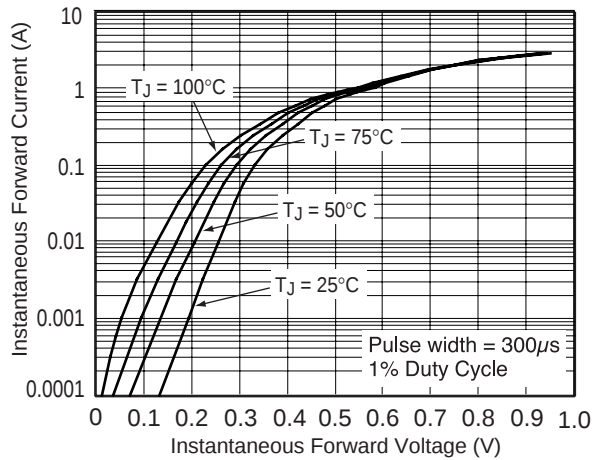


Fig. 8 – Typical Reverse Current Characteristics – SL04

