DSK Diode Semiconductor Korea

SL12---SL13

SMD SCHOTTKY BARRIER RECTIFIERS

VOLTAGE RANGE: 20 - 30 V
CURRENT: 1.0 A

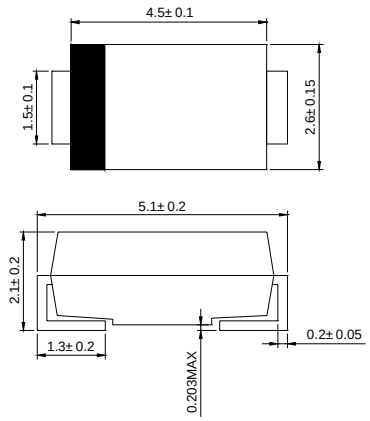
FEATURES

- ◇ For surface mounted applications
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with Alcohol,Isopropnol and similar solvents
- ◇ The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

- ◇ Case: JEDEC SMA,molded plastic
- ◇ Terminals: Solder plated, solderable per MIL- STD-202,Method 208
- ◇ Polarity: Color band denotes cathode end
- ◇ Weight: 0.002 ounces, 0.064 grams
- ◇ Mounting position: Any

SMA



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

Single phase,half wave,60 Hz,resistive or inductive load. For capacitive load,derate by 20%.

		SL12	SL13	UNITS
Device marking code		SL12	SL13	
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	V
Maximum RMS voltage	V_{RMS}	14	21	V
Maximum DC blocking voltage	V_{DC}	20	30	V
Average forward rectified current	$I_{F(AV)}$	1.0		A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	50		A
Maximum instantaneous forward voltage (Note1) @ 0.1 A / @ 1.0 A	V_F	0.360 / 0.445		V
Maximum reverse current @T_A=25℃ / at rated DC blocking voltage @T_A=100℃	I_R	0.2 / 6.0		mA
Typical thermal resistance (Note2)	$R_{\theta JL}$ / $R_{\theta JA}$	28 / 88		℃/W
Operating temperature range	T_j	- 55 -- +125		℃
Storage temperature range	T_{STG}	- 55 -- +150		℃

NOTE: 1.Pulse test: 300 μs pulse width.1%duty cycle

2.P.C.B. mounted with 0.2×0.2″ (5.0×5.0mm) copper pad areas

Fig. 1 — Forward Derating Curve

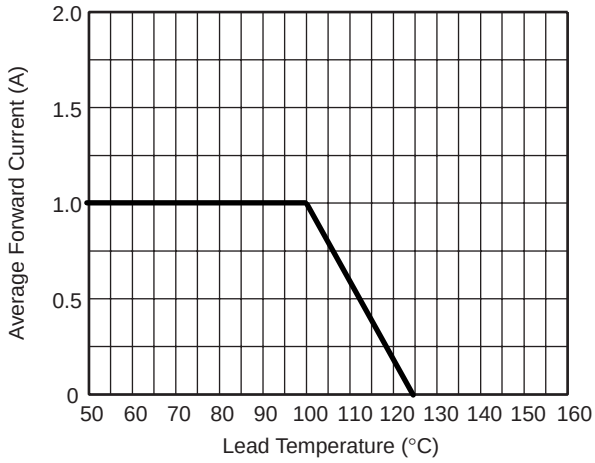


Fig. 2 — Maximum Non-Repetitive Peak Forward Surge Current

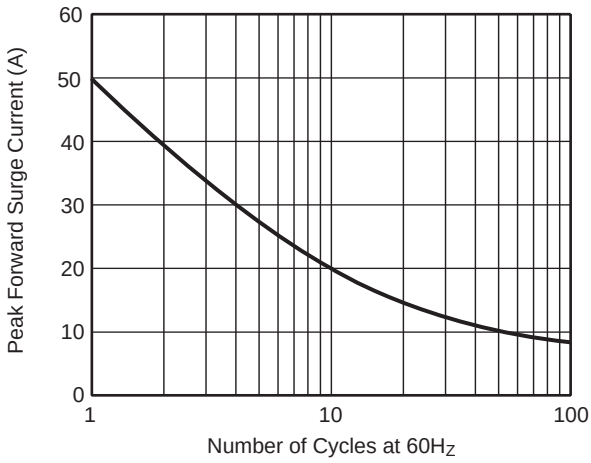


Fig. 3 — Typical Instantaneous Forward Characteristics

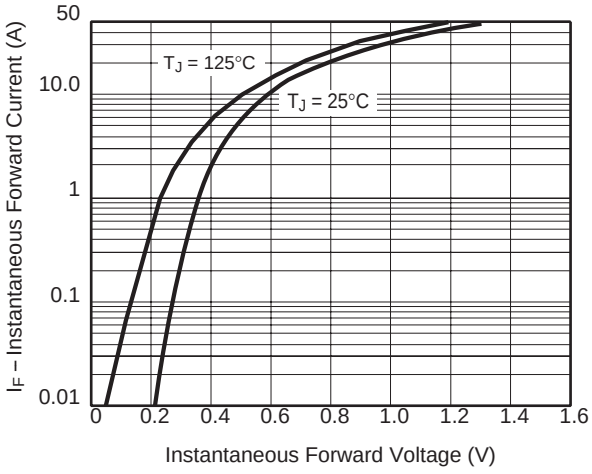


Fig. 4 — Typical Reverse Current Characteristics

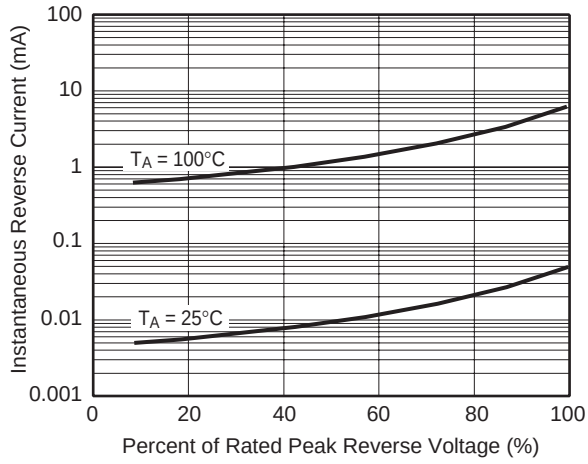


Fig. 5 — Typical Junction Capacitance

