

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE: 20 - 100 V

SSL12-SSL14

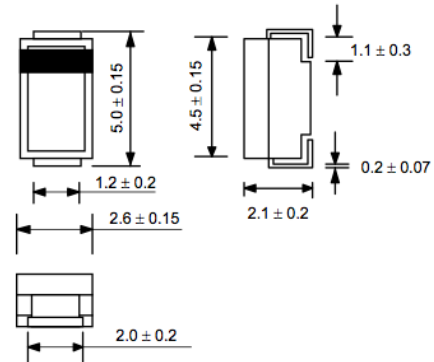
FEATURES

- Guarding protection
- Low forward voltage
- Reverse energy tested
- High current capability
- Extremely low thermal resistance

MECHANICAL DATA

- Case: SMA Molded plastic
- Epoxy: UL94V-O rate flame retardant
- Lead: Lead Formed for Surface Mount
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 0.067 gram

SMA (DO-214AC)



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

		SSL12	SSL13	SSL14	UNITS
Device marking code		SSL12	SSL13	SSL14	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	V
Maximum RMS voltage	V_{RWS}	14	21	28	V
Maximum DC blocking voltage	V_{DC}	20	30	40	V
Maximum average forward rectified current at $T_L=90^\circ\text{C}$	$I_{F(AV)}$	1.0			A
Peak forward surge current 8.3ms single half-sine-wave	I_{FSM}	40			A
Maximum instantaneous forward voltage at $I_{FM}=0.1\text{A}$ (NOTE1)	V_F	0.28	0.28	0.38	V
Maximum instantaneous forward voltage at $I_{FM}=1.0\text{A}$ (NOTE1)	V_F	0.38	0.38	0.40	V
Maximum DC reverse current $T_J=25^\circ\text{C}$	I_R	0.5			mA
		50			
Maximum thermal resistance	$R_{\theta JL}$	75			°C/W
Operating temperature range	T_J	-55-----+125			°C
Storage temperature range	T_{STG}	-55-----+150			°C

NOTE :

- Pulse test: Pulse width 300us, duty cycle 1%

Ratings and Characteristic Curves

FIG.1-Forward Derivative Curve

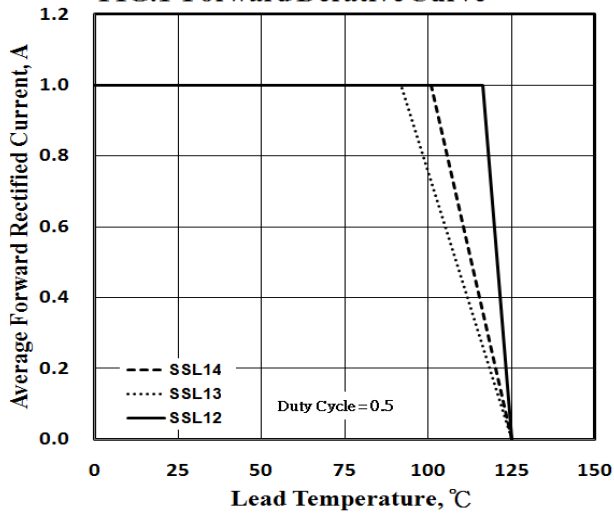


FIG.2-Max FWD Surge Current

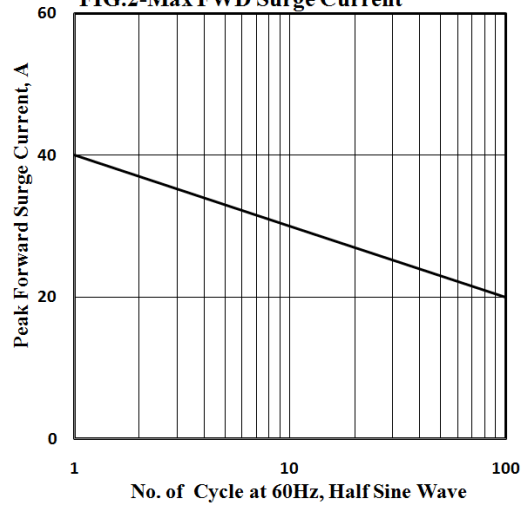


FIG.3-Typical Forward Characteristic Curve

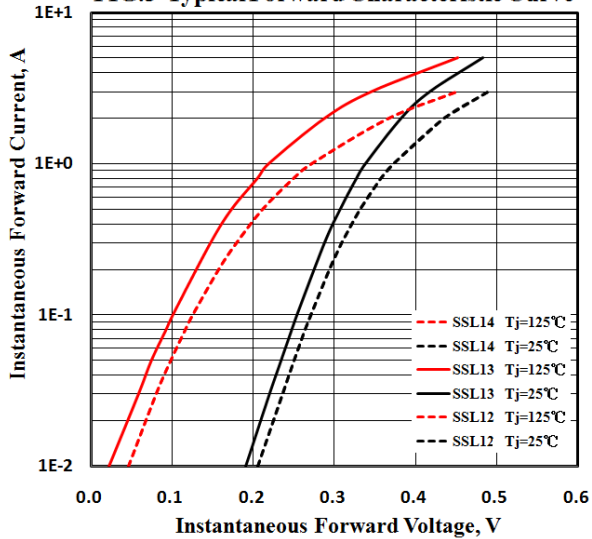


FIG.4-Typical Reverse Characteristic Curve

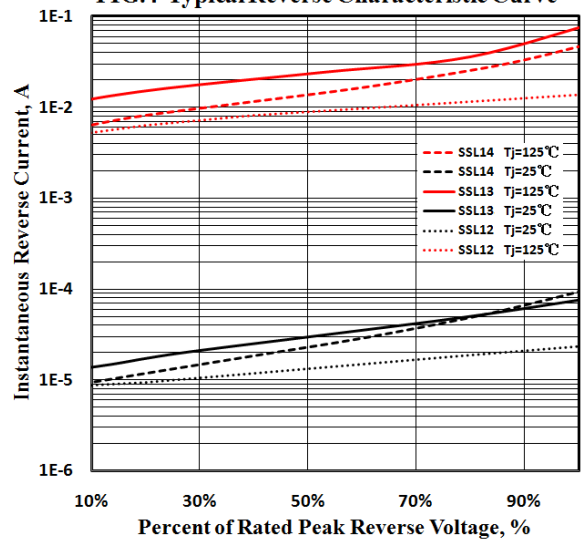


FIG.5-Typical Junction Capacitance

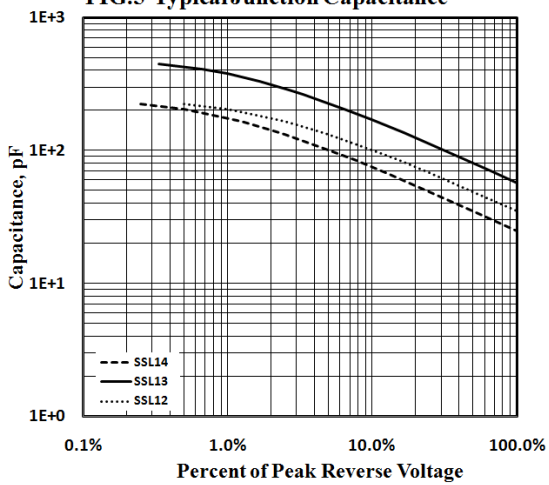


Fig.6-Typical Operating Temperature Derating

