

SSL12 - SSL14

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

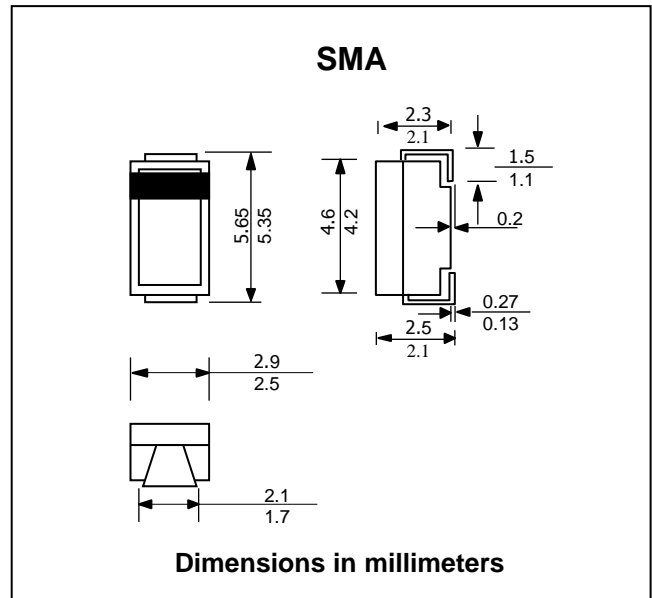
PRV : 20 - 40 Volts
I_o : 1.0 Ampere

FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * High efficiency
- * Low power loss
- * Low forward voltage drop
- * Low cost
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : SMA Molded plastic
- * Epoxy : UL94V-0 rate flame retardant
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.060 gram (Approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

| RATING | SYMBOL | SSL12 | SSL13 | SSL14 | UNIT |
|---|--------------------|---------------|-------|-------|------|
| Maximum Recurrent 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 Current See Fig.1 | I _{F(AV)} | 1.0 | | | A |
| Maximum Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC Method) | I _{FSM} | 30 | | | A |
| Maximum Forward Voltage at I _F = 1.0 A | V _F | 0.385 | | 0.40 | V |
| Maximum Reverse Current at Rated DC Blocking Voltage ⁽¹⁾ | I _R | 0.5 | | | mA |
| | | 5.0 | | | |
| Typical Thermal Resistance ⁽²⁾ | R _{θJL} | 28 | | | °C/W |
| | R _{θJA} | 88 | | | °C/W |
| Operating Junction Temperature Range | T _J | - 65 to + 125 | | | °C |
| Storage Temperature Range | T _{STG} | - 65 to + 125 | | | °C |

Notes:

(1) Pulse Test : Pulse Width = 300 μs, Duty Cycle = 1%.

(2) Mounted on P.C. Board with 5.0mm² (0.2 × 0.2") copper pad areas.

RATING AND CHARACTERISTIC CURVES (SSL12 - SSL14)

FIG.1 - FORWARD CURRENT DERATING CURVE

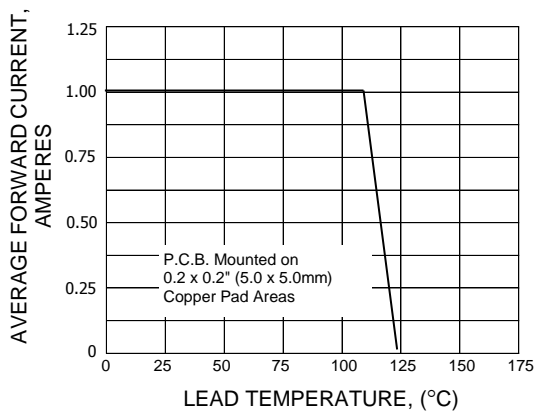


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

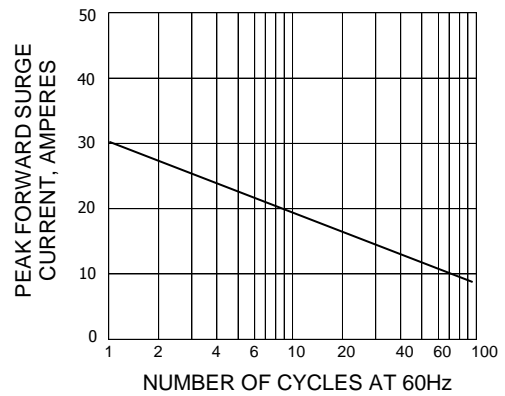


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

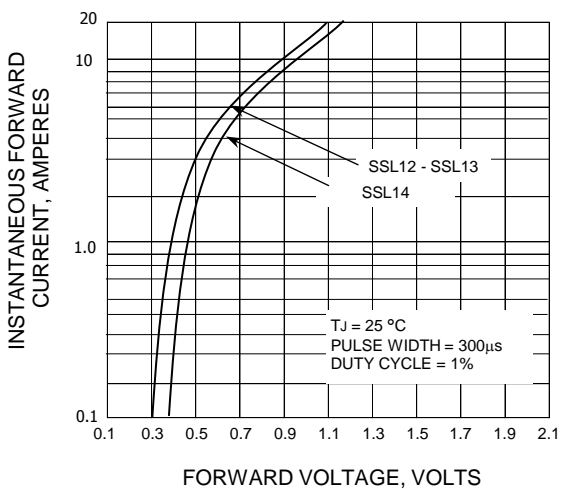


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

