

Surface Mount Schottky Barrier Rectifier
Reverse Voltage - 40V
Forward Current - 5 A
FEATURES

- ◆Metal silicon junction, majority carrier conduction
- ◆For surface mounted applications
- ◆Low power loss, high efficiency
- ◆High forward surge current capability
- ◆For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- ◆Case: DO-214AC/SMA
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 0.07g / 0.002oz

Pinning

1.Cathode	2.Anode
	
DO-214AC/SMA	

Marking Code

SSL54	YFW SSL54
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Absolute Maximum Ratings and Electrical characteristics

Ratings at 25 ° ambient temperature unless otherwise specified.Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

Parameter	Symbols	SSL54	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Maximum RMS voltage	V_{RMS}	28	V
Maximum DC Blocking Voltage	V_{DC}	40	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method)	I_{FSM}	150	A
Maximum Instantaneous Forward Voltage at 5 A	V_F	0.45	V
Maximum Instantaneous Reverse Current at Rated DC Reverse Voltage $T_A = 25^{\circ}C$ $T_A = 100^{\circ}C$	I_R	1.0 50	mA
Typical Junction Capacitance ⁽¹⁾	C_j	800	pF
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$	45	°C/W
Operating Junction Temperature Range	T_j	-55 ~ +150	°C
Storage Temperature Range	T_{stg}	-55 ~ +150	°C

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Ratings And Characteristic Curves

Fig.1 Forward Current Derating Curve

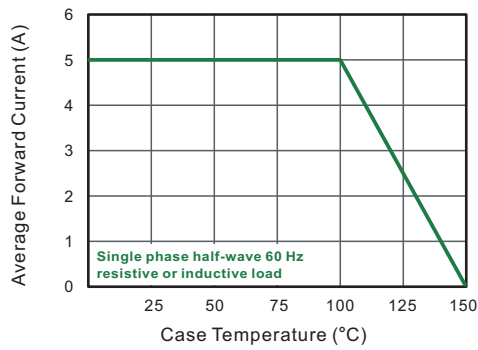


Fig.2 Typical Reverse Characteristics

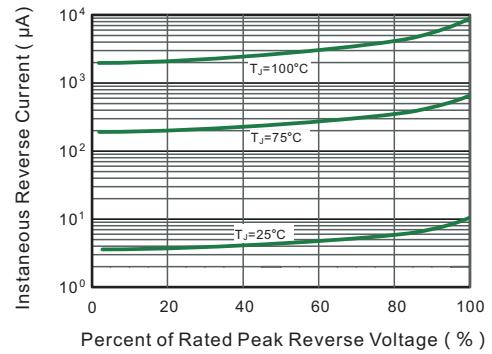


Fig.3 Typical Forward Characteristic

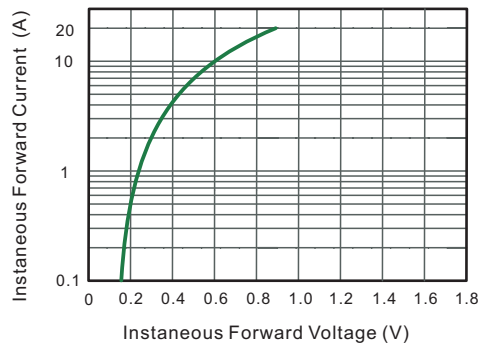


Fig.4 Typical Junction Capacitance

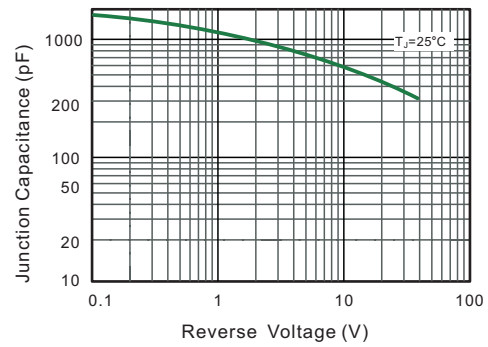


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

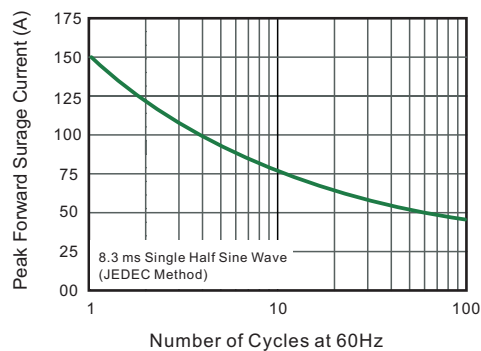
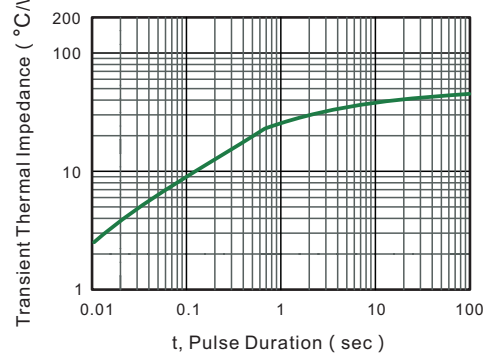


Fig.6- Typical Transient Thermal Impedance



Marking Diagram



Ordering information

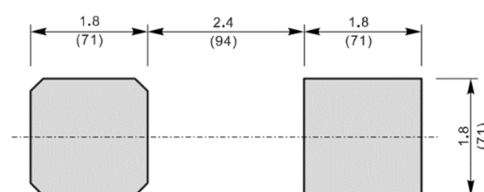
Package	Packing Description	Packing Quantity
DO-214AC SMA	Tape/Reel, 13" reel	5000PCS/Reel 50000PCS/Carton
	Tape/Reel, 7" reel	2000PCS/Reel 50000PCS/Carton

Package Dimensions

DO-214AC SMA

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	1.9	2.45	75	96
D	4.0	4.5	157	181
E	2.5	2.8	100	110
H _E	4.7	5.2	185	205
c	0.15	0.31	6	12
e	1.3	1.8	51	71
g	0.9	1.5	35	59
b	0.05	0.2	2	7.9
a	0.3		12	

The recommended mounting pad size



Unit : $\frac{\text{mm}}{(\text{mil})}$

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