

Surface Mount Schottky Barrier Rectifier

Reverse Voltage – 40~100V

Forward Current - 5 A

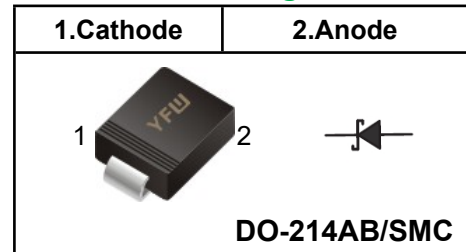
FEATURES

- ◆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-214AB/SMC
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 0.22g / 0.0077oz

Pinning



Marking Code

SSL54C	YFW SSL54
SSL545C	YFW SSL545
SSL55C	YFW SSL55
SSL56C	YFW SSL56
SSL510C	YFW SSL510

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	SSL54C	SSL545C	SSL55C	SSL56C	SSL510C	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	45	50	60	100	V
Maximum RMS voltage	V_{RMS}	28	32	35	42	70	V
Maximum DC Blocking Voltage	V_{DC}	40	45	50	60	100	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			0.50	0.60	V
Maximum Instantaneous Reverse Current at Rated DC Reverse Voltage <small>$T_A = 25^{\circ}C$ $T_A = 100^{\circ}C$</small>	I_R	0.5 50					mA
Typical Junction Capacitance ⁽¹⁾	C_j	500	300				pF
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$	60					°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.

Fig.1 Forward Current Derating Curve

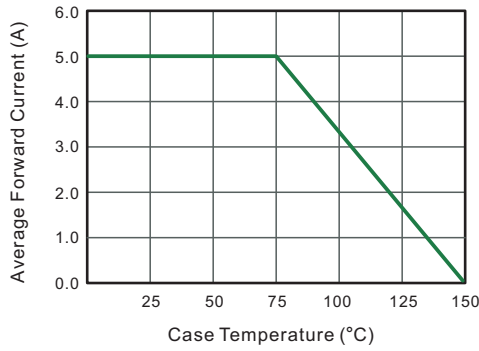


Fig.2 Typical Reverse Characteristics

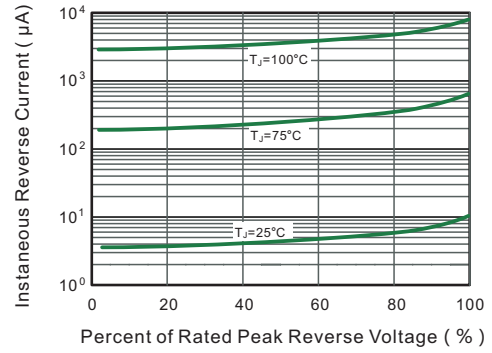


Fig.3 Typical Forward Characteristic

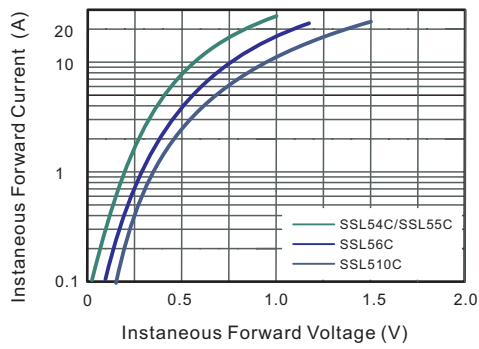


Fig.4 Typical Junction Capacitance

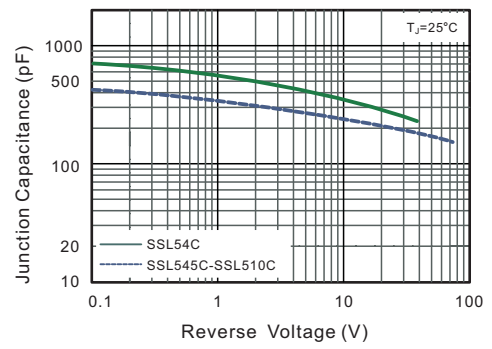


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

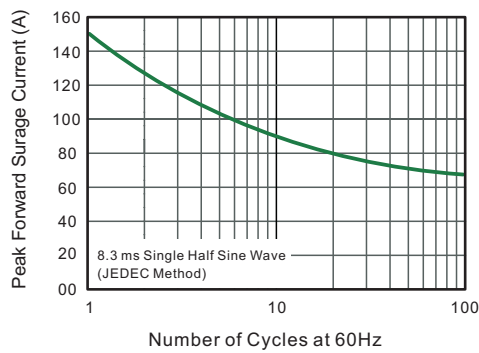
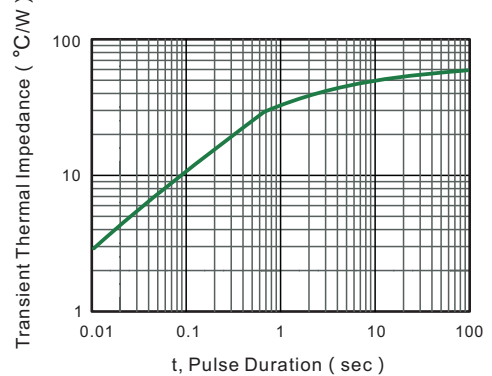


Fig.6- Typical Transient Thermal Impedance



Marking Diagram



Ordering information

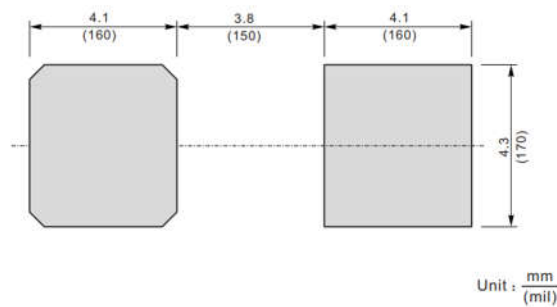
Package	Packing Description	Packing Quantity
DO-214AB SMC	Tape/Reel, 13" reel	3000PCS/Reel 30000PCS/Carton

Package Dimensions

DO-214AB SMC

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	2.00	2.62	79	103
E	6.5	7.0	256	276
D	5.6	6.2	220	244
E ₁	7.6	8.0	299	315
A ₁	0.05	0.21	2.0	8.3
C	0.15	0.31	5.9	12
L	0.9	1.6	35	63
b	2.75	3.25	108	128

The recommended mounting pad size



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