

Surface Mounted Schottky Barrier Rectifiers

Reverse Voltage - 40 to 100 V

Forward Current - 10 A

FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Built-in strain relief, ideal for automated placement
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed 260°C/10 seconds at terminals


MECHANICAL DATA

- ◆ Case : Molded plastic body
- ◆ Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- ◆ Polarity : Polarity symbol marking on body
- ◆ Mounting Position : Any
- ◆ Weight : 0.008 ounce, 0.225 grams

Maximum Ratings And Electrical Characteristics

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

Pinning

1.Cathode	2.Anode
	
DO-214AB/SMC	

Marking Code

SSL1040C	YFW SSL1040
SSL1045C	YFW SSL1045
SSL1050C	YFW SSL1050
SSL1060C	YFW SSL1060
SSL1080C	YFW SSL1080
SSL10100C	YFW SSL10100

Parameter	Symbols	SSL1040C	SSL1045C	SSL1050C	SSL1060C	SSL1080C	SSL10100C	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	45	50	60	80	100	V
Maximum RMS voltage	V_{RMS}	28	31.5	35	42	56	70	V
Maximum DC Blocking Voltage	V_{DC}	40	45	50	60	80	100	V
Maximum Average Forward Rectified Current at $T_L=100^{\circ}C$	$I_{(AV)}$	10						A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load	I_{FSM}	150						A
Maximum Instantaneous Forward Voltage at 10 A	V_F	0.48			0.55	0.70		V
Maximum DC reverse current at rated DC blocking voltage $T_A = 25^{\circ}C$ $T_A = 100^{\circ}C$	I_R	0.5 50				0.2 20		mA
Typical Thermal Resistance	$R_{\theta JA}$	47						$^{\circ}C/W$
Operating Junction Temperature Range	T_j	-55 ~ +150						$^{\circ}C$
Storage Temperature Range	T_{stg}	-55 ~ +150						$^{\circ}C$

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

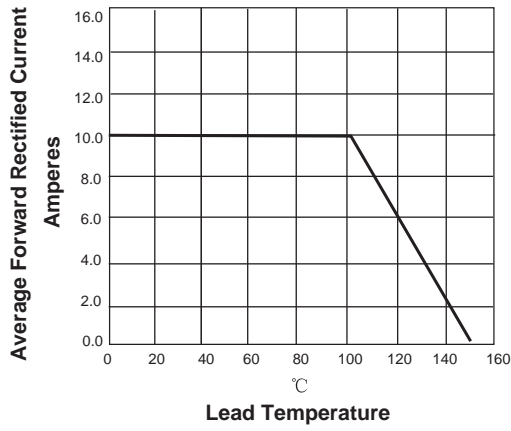


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

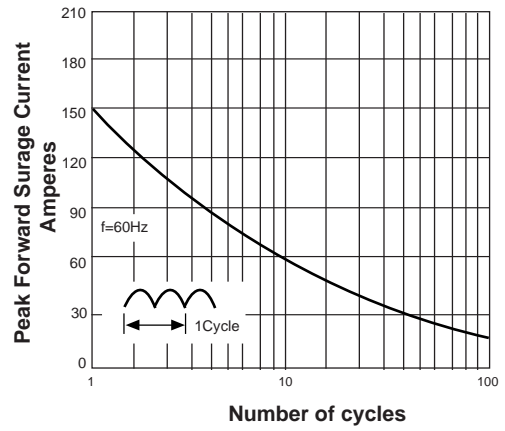


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

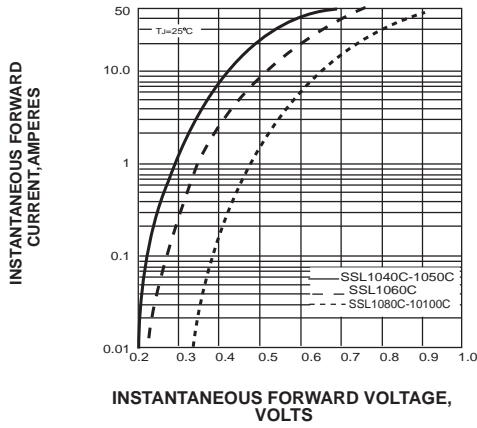
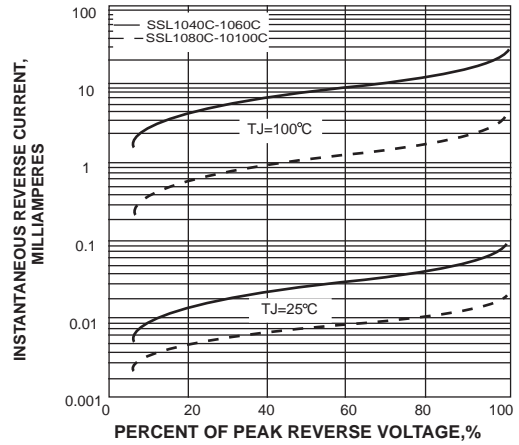


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Marking Diagram



Ordering information

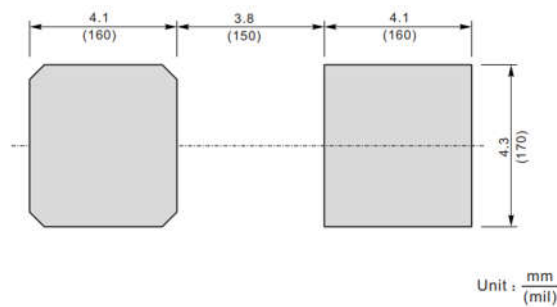
Package	Packing Description	Packing Quantity
DO-214AB SMC	Tape/Reel, 13" reel	3000PCS/Reel 30000PCS/Carton

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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