

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	SSL1040
SSL1045C	SSL1045
SSL1050C	SSL1050
SSL1060C	SSL1060
SSL1080C	SSL1080
SSL10100C	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°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°C T _A = 100°C	I _R	0.5 50				0.2 20		mA
Typical Thermal Resistance	R _{θJA}	47						°C/W
Operating Junction Temperature Range	T _J	-55 ~ +150						°C
Storage Temperature Range	T _{stg}	-55 ~ +150						°C

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

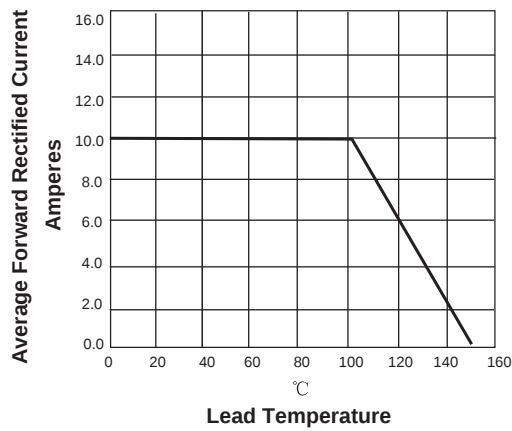


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

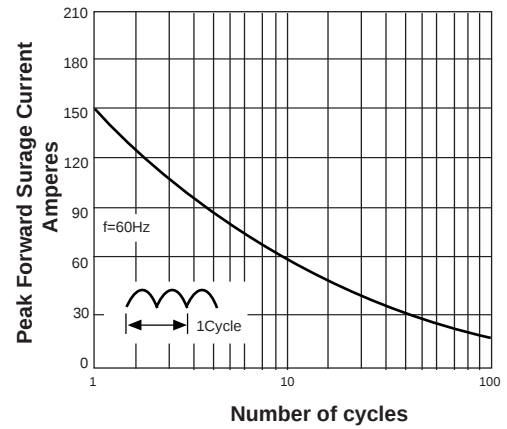


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

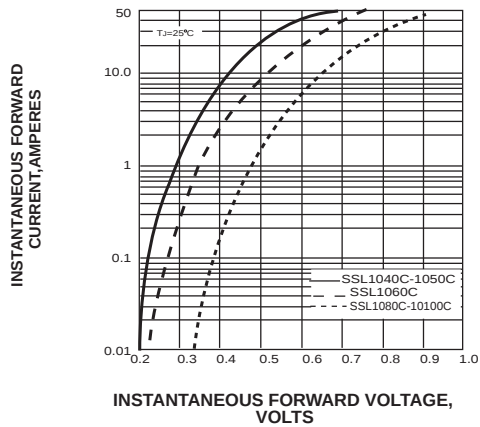
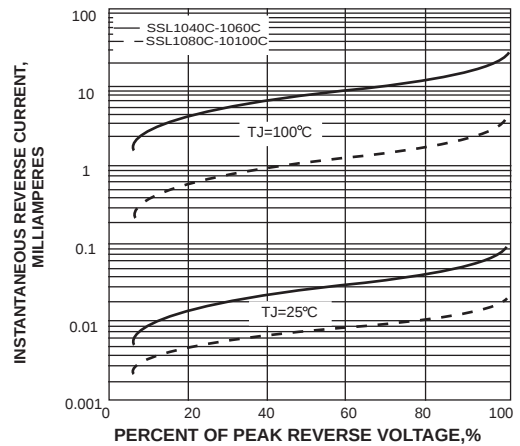
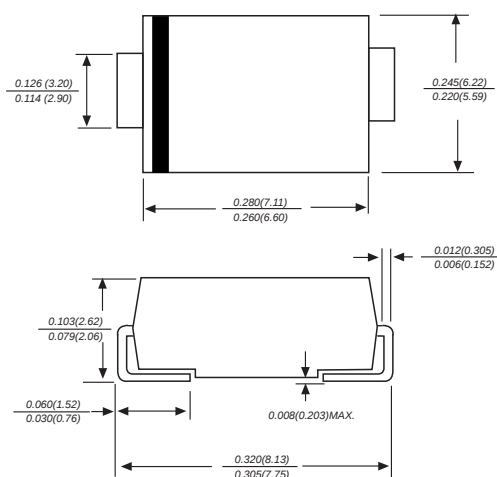


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Package Outline

DO-214AB SMC



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
DO-214AB SMC	Tape/Reel, 13" reel	3000	EIA-481-1