SS12 THRU SS110

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS
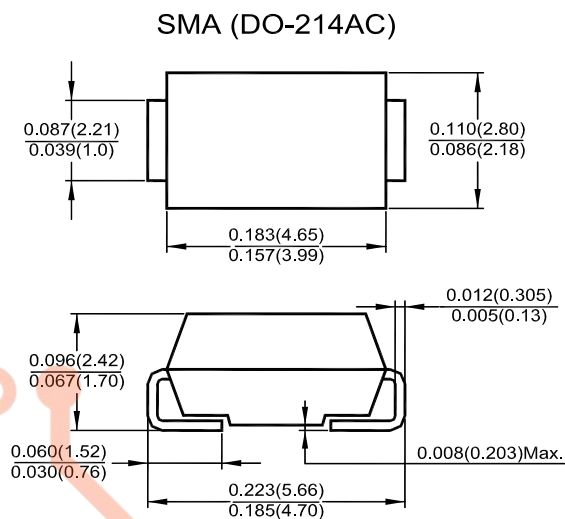**Reverse Voltage - 20 to 100 V**
Forward Current - 1 A

Features
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Built-in strain relief, ideal for automated placement
- Low power loss, high efficiency.
- High forward surge current capability

Mechanical Data
- **Case:** SMA (DO-214AC) molded plastic body
- **Terminals:** leads solderable per MIL-STD-750, Method 2026
- **Polarity:** color band denotes cathode end

SMA (DO-214AC)

0.087(2.21)
0.039(1.0)

0.110(2.80)
0.086(2.18)

0.183(4.65)
0.157(3.99)

0.012(0.305)
0.005(0.13)

0.096(2.42)
0.067(1.70)

0.060(1.52)
0.030(0.76)

0.008(0.203)Max.

0.223(5.66)
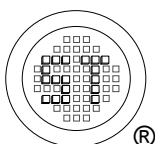0.185(4.70)

Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

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

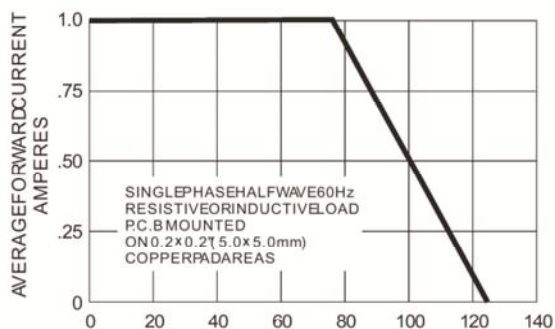| Parameter	Symbols	SS12	SS13	SS14	SS15	SS16	SS18	SS110	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1							A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30							A
Maximum Instantaneous Forward Voltage at 1 A	V_F	0.55			0.75		0.85		V
Maximum DC Reverse Current T_a = 25℃	I_R	0.5							mA
at Rated DC Blocking Voltage T_a = 100℃		20							
Typical Junction Capacitance [1]	C_j	110							pF
Typical Thermal Resistance [2]	$R_{\theta JA}$	88							℃/W
Operating Junction Temperature Range	T_j	- 55 to + 125							℃
Storage Temperature Range	T_{stg}	- 55 to + 150							℃

[1] Measured at 1MHz and applied reverse voltage of 4 V D.C.

[2] P.C.B. mounted with 0.2 X 0.2" (5 X 5 mm) copper pad areas.

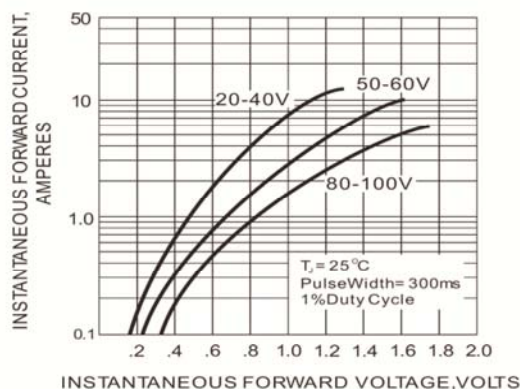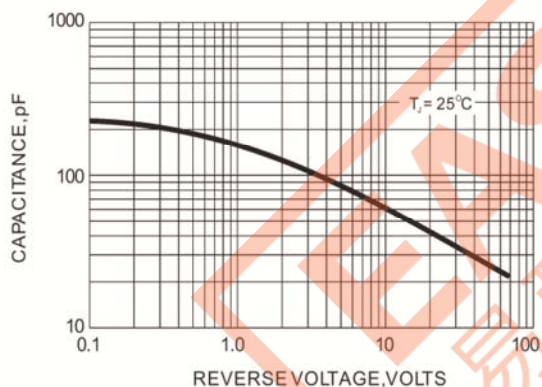**SEMTECH ELECTRONICS LTD.**

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Certificate No. 160713060

ISO14001 : 2004
Certificate No. 7116

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BS-OHSAS 18001 : 2007
Certificate No. 7116

IECQ QC 080000
Certificate No. PRC-HSPM-1483-1
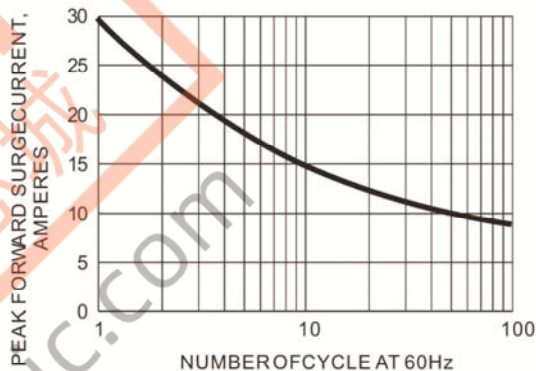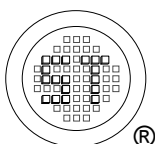
FORWARD CURRENT DERATING CURVE

TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

TYPICAL JUNCTION CAPACITANCE

MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

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