

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER SS12 THRU SS1B 20 to 200 V 1.0A

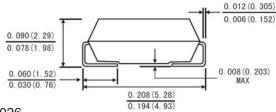
Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- For surface mount applications
- Guard ring for over voltage protection
- Low power loss, high efficiency
- High current capability, Low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling ,and polarity protection applications
- High temperature soldering guaranteed: 250°C/10 seconds at terminals

Mechanical Data

- Case: JEDEC SMA(DO-214AC) molded plastic body
- Terminals: solder plated ,solder able per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end
- Weight: 0.002ounce, 0.064 gram

SMA(DO-214AC) 0. 110 (2. 79) 0. 100 (2. 54) 0. 177 (4. 50) 0. 157 (3. 99)



Dimensions in inches and (millimeters)

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, derate current by 20%.

Type Numbe	Symbols	SS12	SS14	SS16	SS1A	SS1A5	SS1B	- Units
		SK12	SK14	SK16	SK1A	SK1A5	SK1B	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	40	60	100	150	200	Volts
Maximum RMS Voltage	V_{RMS}	14	28	42	70	105	140	Volts
Maximum DC Blocking Voltage	V _{DC}	20	40	60	100	150	200	Volts
Maximum average forward rectified current (See Fig. 1)	I _(AV)	1.0						Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	50.0						Amp
Maximum instantaneous forward voltage at 1.0A(Note 1)	V _F	0.55		0.70	0.85	0.90	0.95	Volts
Maximum Reverse Current TA=25°C at Rated DC Blocking Voltage TA=100°C	I _R	0.5 10.0						mAmp
Typical Thermal Resistance (Note 2)	R _⊙ JA	35						°C/W
Operating Temperature Range	TJ	-65 to +150						$^{\circ}\!\mathbb{C}$
Storage Temperature Range	T _{STG}	-65 to +150						$^{\circ}\!\mathbb{C}$

NOTES:

- 1. Pulse test: 300 μ s pulse width, 1% duty cycle
- 2. P.C.B. mounted with 0.2 X 0.2"(5.0 X 5.0mm) copper pad areas



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RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

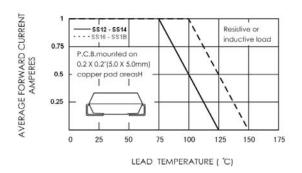


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

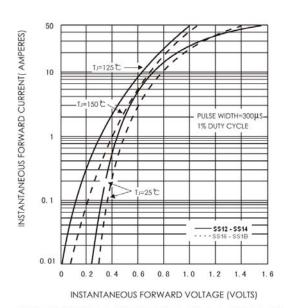


FIG.5-TYPICAL JUNCTION CAPACITANCE

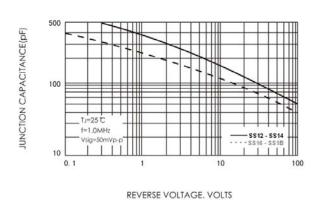
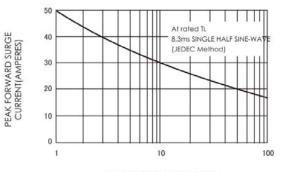
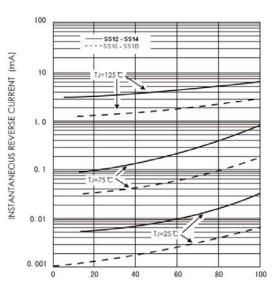


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



NUMBER OF CYCLES AT 60Hz

FIG.4-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE%