

SS12 THRU SS100

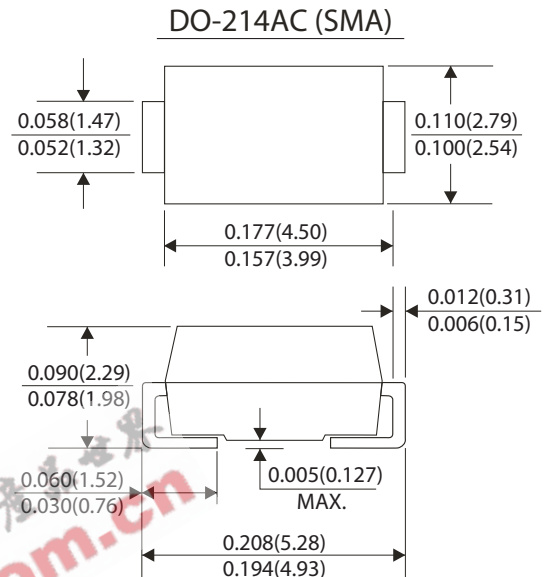
CURRENT 1.0Ampere
VOLTAGE 20 to 100 Volts

Features

- Plastic Package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- For surface mount applications
- Guard ring for overvoltage 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 Plate, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Weight : 0.002 ounce, 0.064 gram



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified, single phase, half wave, resistive or inductive load. For capacitive load, derate by 20%)

		Symbols	SS12	SS13	SS14	SS15	SS16	SS18	SS19	SS100	Units
Maximum repetitive peak reverse voltage		V _{RRM}	20	30	40	50	60	80	90	100	Volts
Maximum RMS voltage		V _{RMS}	14	21	28	35	42	56	63	70	Volts
Maximum DC blocking voltage		V _{DC}	20	30	40	50	60	80	90	100	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length(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}	25.0								Amps
Maximum instantaneous forward voltage at 1.0A (Note 1)		V _F	0.55			0.70		0.85			Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Note1)	T _A =25 °C	I _R	1.0								mA
	T _A =100 °C		10								
Typical thermal resistance (Note 2)		R θ _{JA}	50								°C/W
Operating junction temperature range		T _J	-50 to +125								°C
Storage temperature range		T _{STG}	-65 to +150								°C

Notes:

- (1) Pulse test: 300 μ S pulse width, 1% duty cycle
- (2) Thermal resistance junction to ambient

RATINGS AND CHARACTERISTIC CURVES SS12 THRU SS100

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

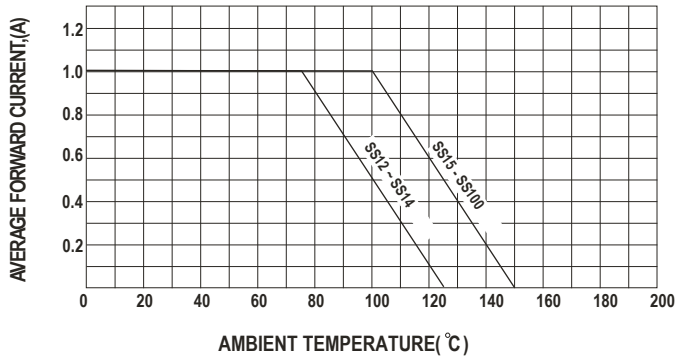


FIG.2-TYPICAL FORWARD CHARACTERISTICS

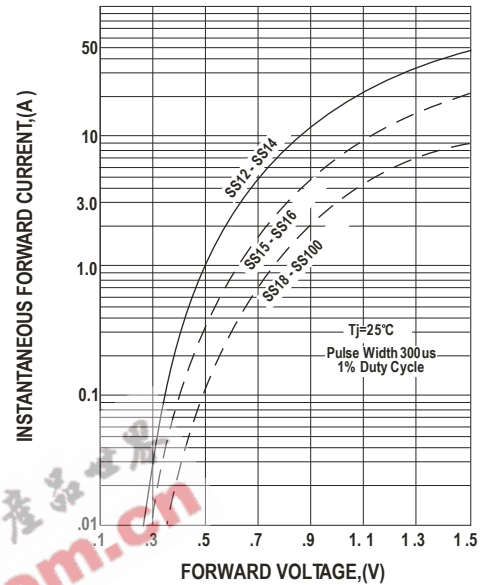


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

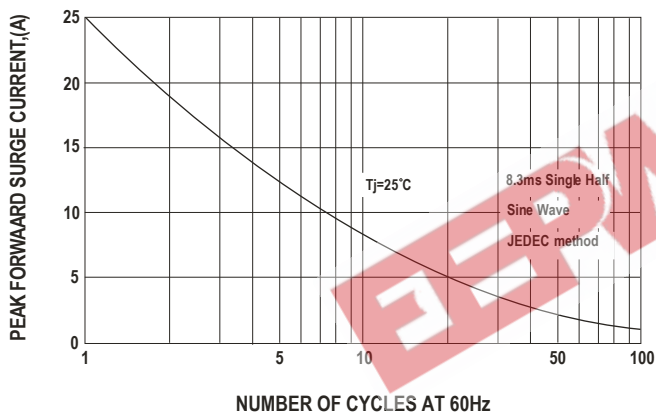


FIG.4-TYPICAL JUNCTION CAPACITANCE

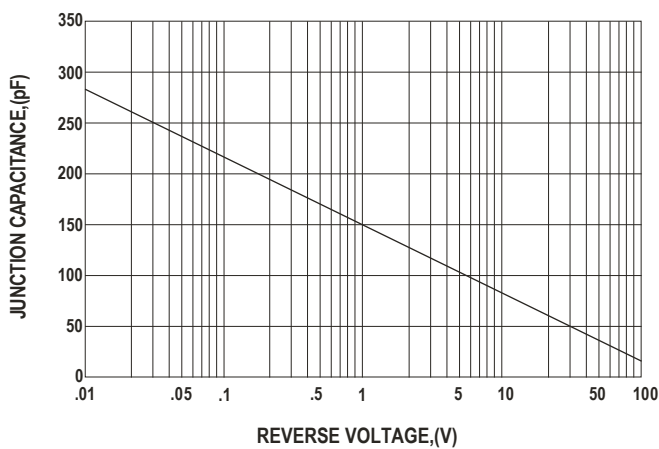


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

