# SS12 THRU SS120

1.0AMP Surface Mount Schottky Barrier Rectifier

Features

- Schottky Brrier Chip
- Low Power Loss,High Efficiency
- Ideally Suited for Automatic Assembly
- Surge Overload Rating to 30A Peak
- Plastic Case Material has UL Flammability
  Classification Rating 94V-0

Mechanical Data

- Case: Molded plastic SMA
- Terminals: Plated leads solderable per
  MIL-STD-750,Method 2026 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Making: Type Number

Case: SMA(DO-214AC)

Dimensions in inches and (millimeters)
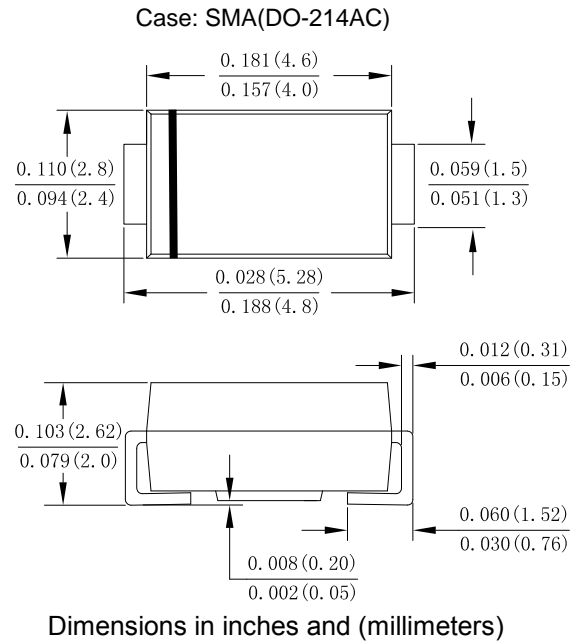
Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified

Single phase,half wave,60Hz,resistive or inductive load

For capacitive load derate current by 20%

Type Number	SYMBOL	SS12	SS13	SS14	SS145	SS15	SS16	SS18	SS110	SS115	SS120	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	45	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	31	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	45	50	60	80	100	150	200	V
Average Rectified Output Current @T_L =100 ℃	$IF_{(AV)}$	1.0										A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30										A
Rating for fusing (t<8.3ms)	$I^2 t$	3.74										A^2 s
Forward Voltage @IF=1.0A	V_{FM}	0.55				0.7		0.85		0.92		V
Peak Reverse Current @T_A =25 ℃	I_R	0.1						0.05				mA
At Rated DC Blocking Voltage @T_A =100 ℃		10						5				
Typical Junction Capacitance (Note 1)	C_J	35						20				pF
Typical Thermal Resistance perleg	$R_{θJA}$	110										℃/W
Operating Temperature Range	T_J	-55 to+150										℃
Storage Temperature Range	T_{STG}	-55 to +150										℃

Note:

　　　1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C
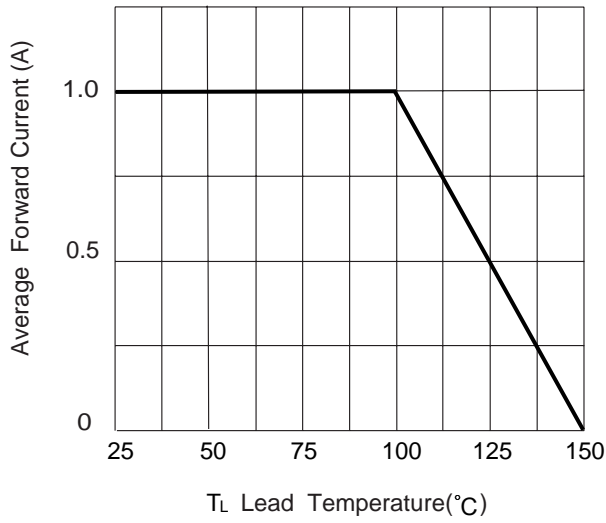
Fig. 1 Forward Current Derating Curve

Fig. 2 Typ. Forward Characteristics
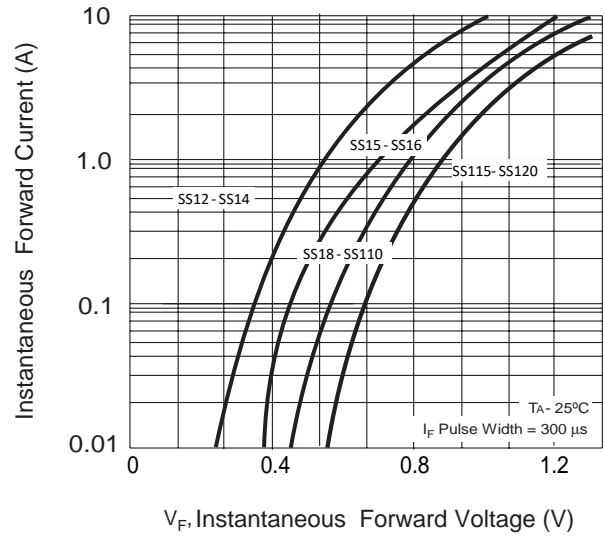
Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

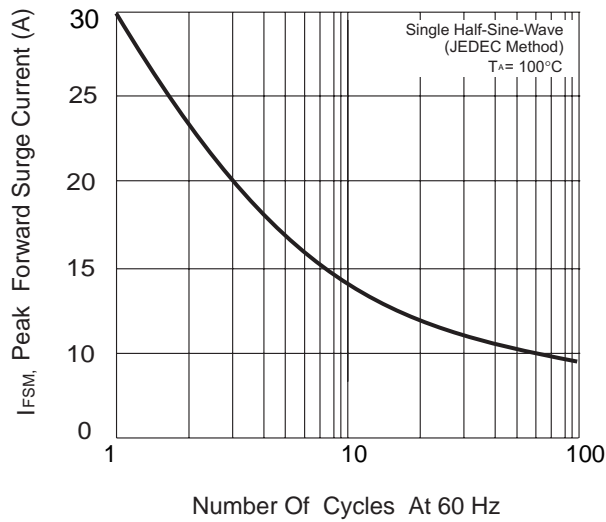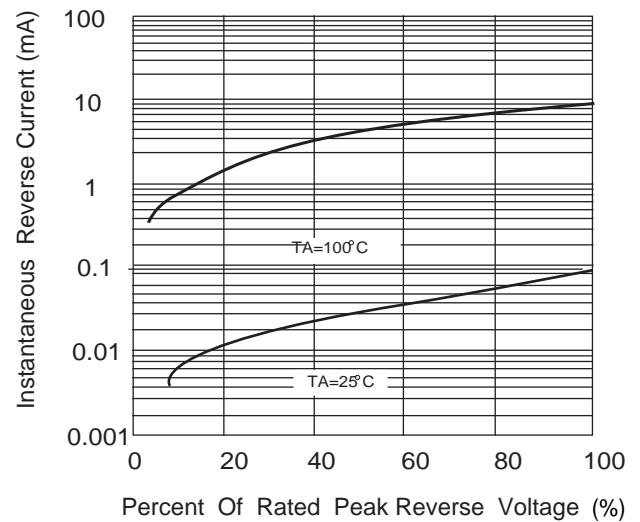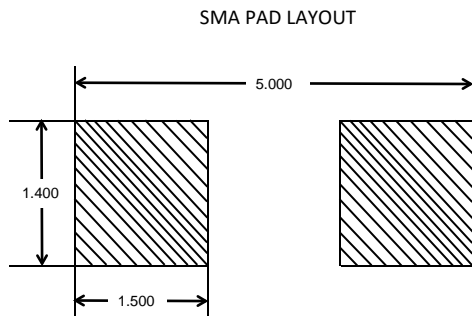Fig.4 Typical Reverse Chracteristics (per element)

Fig.5 Mounting PAD Layout

SMA PAD LAYOUT

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