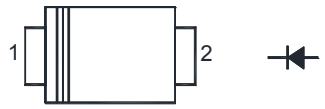
SS12 THRU SS110

Surface Mount Schottky Barrier Rectifiers
Reverse Voltage - 20 to 100 V
Forward Current - 1 A

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top view
Plastic Package : SMA(DO-214AC)

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

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
	Marking	SS12	SS13	SS14	SS15	SS16	SS18	SS110	-
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]	$R_{\theta JA}$	90							℃/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 2" X 2" (5 X 5 cm) copper pad areas.

Dated：28/10/2020 JD Rev：03

Electrical characteristic curves

Fig.1 Forward Current Derating Curve

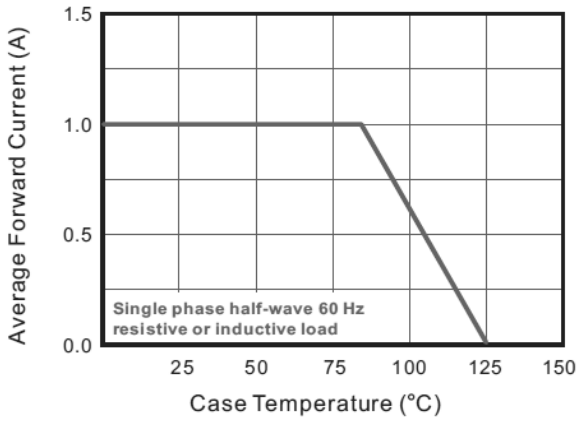


Fig.2 Typical Reverse Characteristics

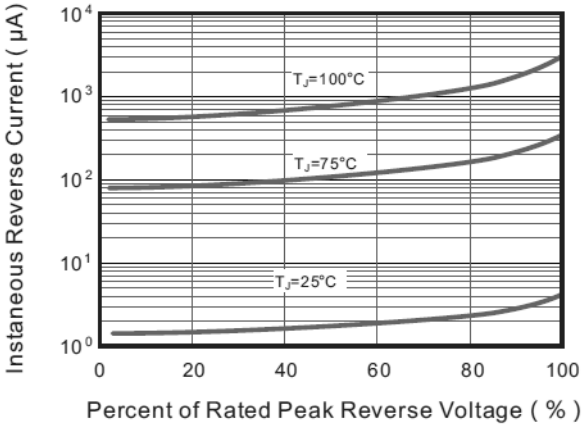


Fig.3 Typical Forward Characteristic

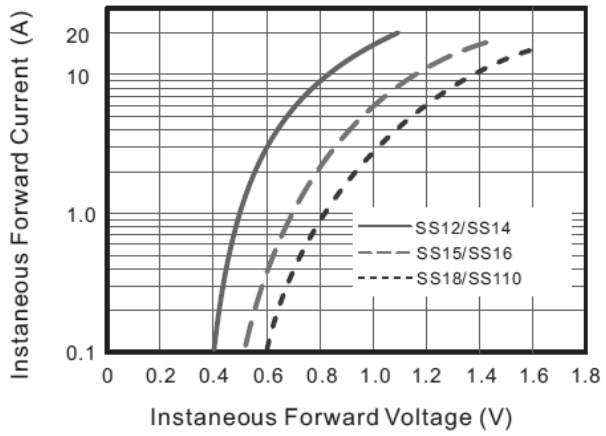


Fig.4 Typical Junction Capacitance

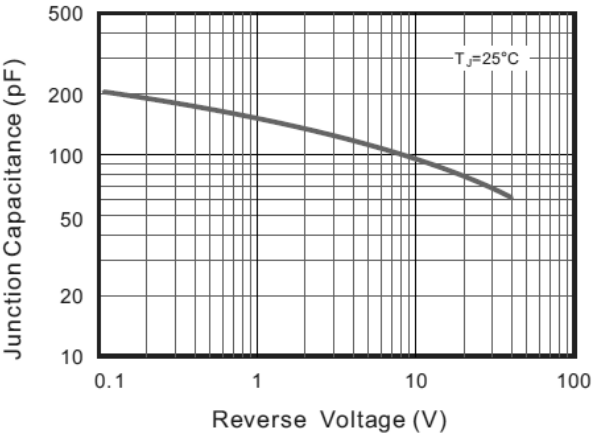


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

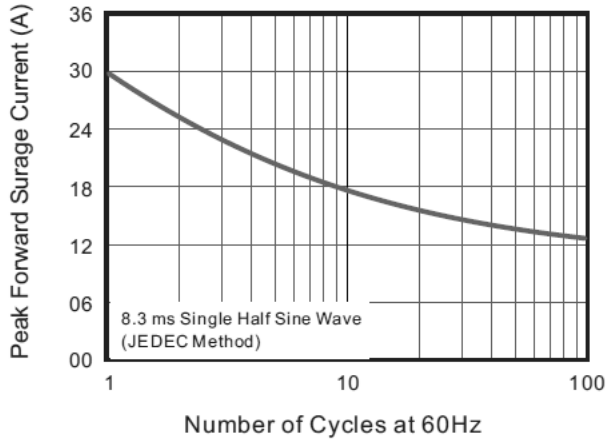
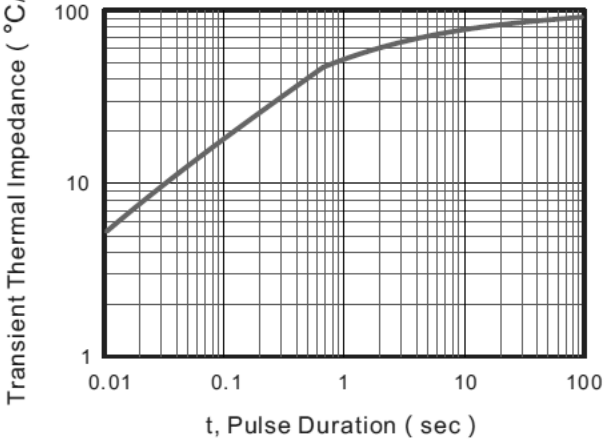
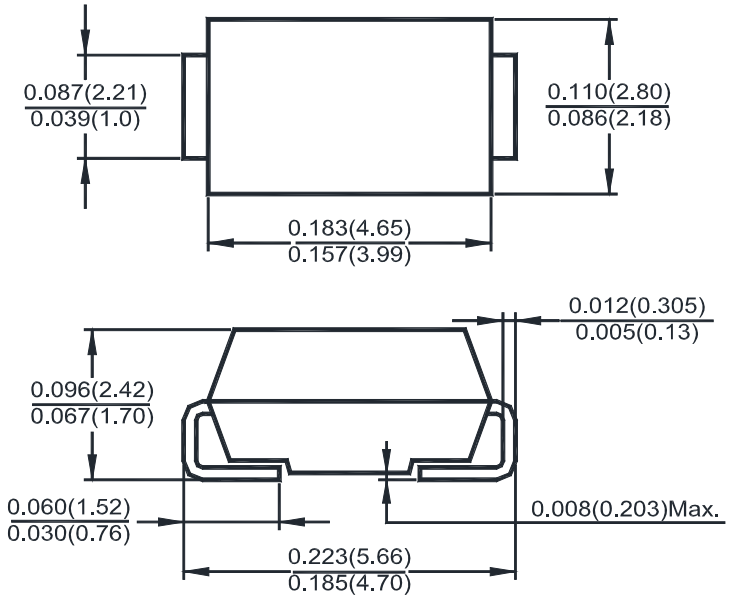


Fig.6- Typical Transient Thermal Impedance



Package Outline Dimensions in inches (millimeters) **SMA(DO-214AC)**



Marking information

" **** " = Part No.

" III " = Cathode line

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