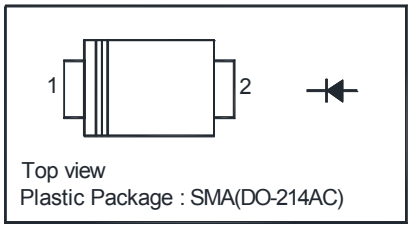
SS5817 THRU SS5819

Surface Mount Schottky Barrier Rectifiers
Reverse Voltage - 20 to 40 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 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

Mechanical Data
- **Case:** SMA (DO-214AC) molded plastic case
- **Terminals:** Solder plate, solderable per MIL-STD -750, method 2026
- **Polarity:** Color band denotes cathode end
- **Mounting Position:** Any

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%

Parameter	Symbols	SS5817	SS5818	SS5819	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	V
Maximum RMS Voltage	V_{RMS}	14	21	28	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	V
Maximum Average Forward Rectified Current	$I_{(AV)}$	1			A
Peak Forward Surge Current 8.3mS Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	25			A
Maximum Instantaneous Forward Voltage at 1 A	V_F	0.45	0.55	0.6	V
Maximum Instantaneous Reverse Current at Rated DC Blocking Voltage at T_A = 25℃	I_R	0.5			mA
at T_A =100℃		10			mA
Typical Junction Capacitance [1]	C_J	110			pF
Typical Thermal Resistance [2]	$R_{\theta JA}$	75			℃/W
Operating Temperature	T_J	125			℃
Storage Temperature Range	T_{Stg}	- 55 to + 150			℃

[1] Measured at 1 MHz and reverse voltage of 4 V.D.C.
[2] P.C.B. mounted with 2" X 2" (5 X 5 cm) copper pad areas.

Dated : 05/12/2020 JD Rev:02

Electrical characteristic curves

Fig.1 Forward Current Derating Curve

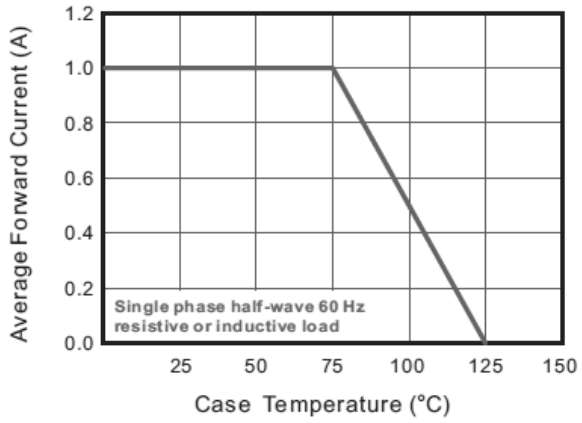


Fig.2 Typical Reverse Characteristics

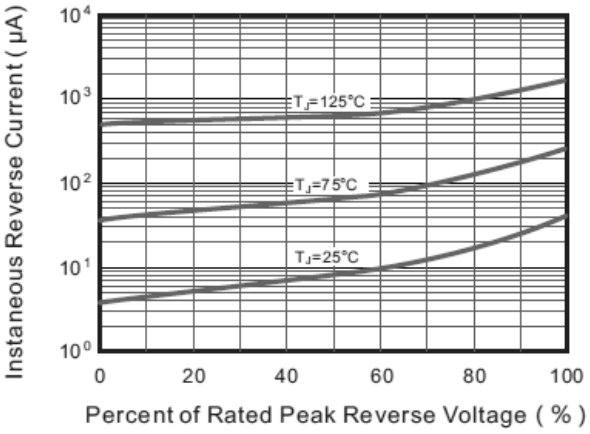


Fig.3 Typical Forward Characteristic

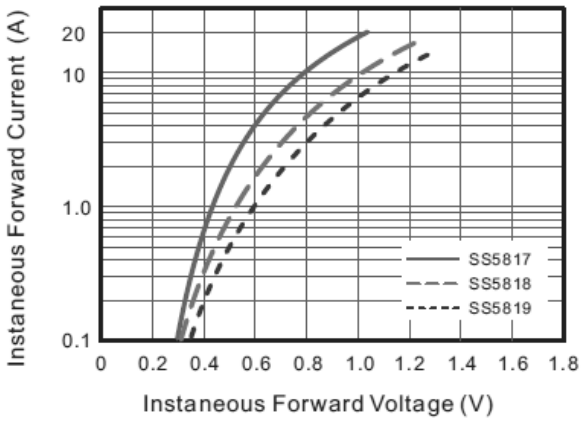


Fig.4 Typical Junction Capacitance

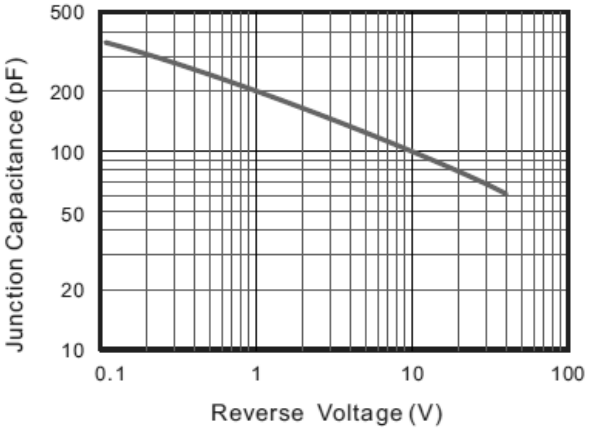


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

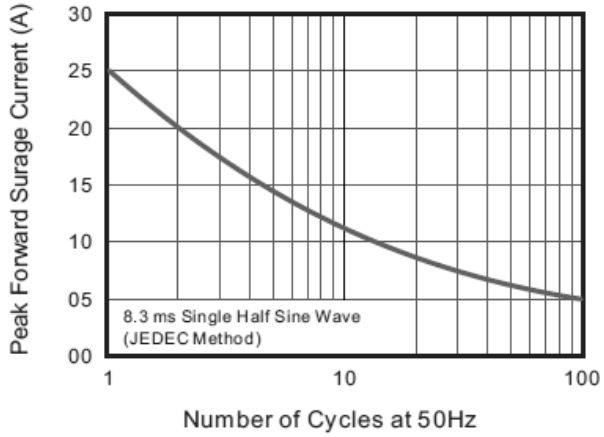
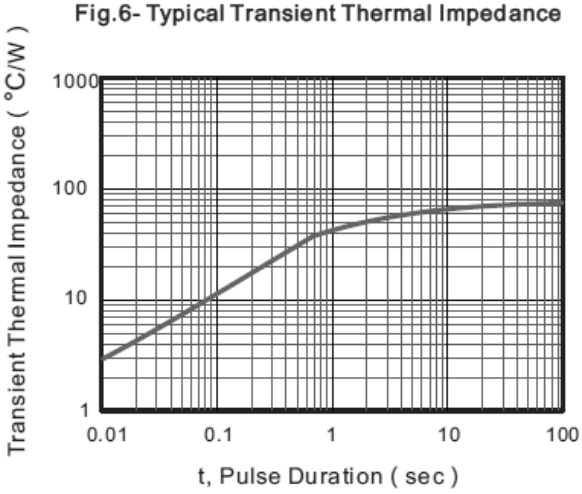
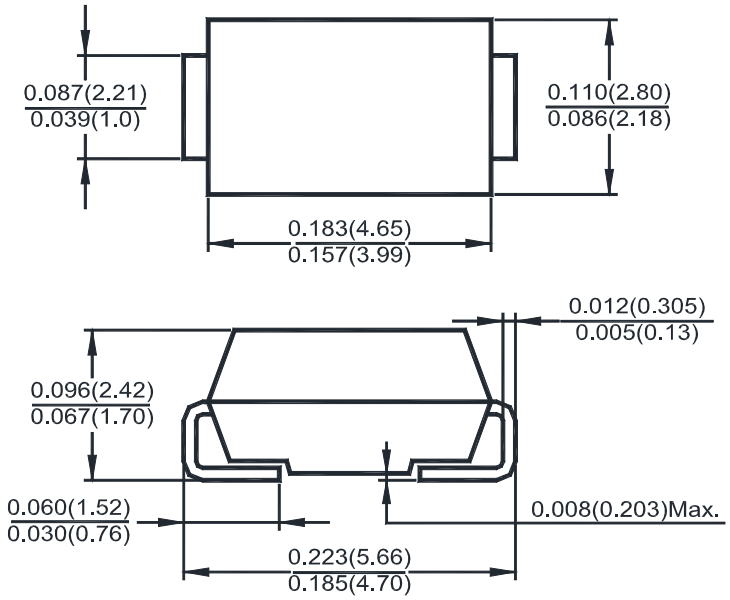


Fig.6- Typical Transient Thermal Impedance



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



Marking information

" ****** " = Part No.
" III " = Cathode line
Font type: Arial