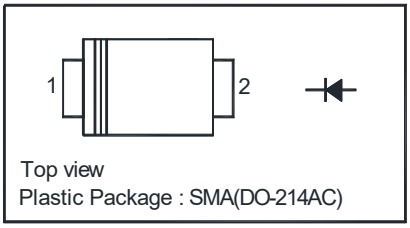
M1 THRU M7

Surface Mount General Purpose Plastic Rectifier
Reverse Voltage – 50 to 1000 V
Forward Current – 1 A

Features
- Glass Passivated Chip Junction
- For surface mounted applications
- Low profile package
- Easy to pick and place

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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

Mechanical Data
- **Case:** SMA (DO-214AC), molded plastic
- **Terminals:** Solder plated, solderable per MIL-STD-750, method 2026

Absolute Maximum Ratings and Characteristics
Ratings at 25℃ ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	M1	M2	M3	M4	M5	M6	M7	Units
	Marking	M1	M2	M3	M4	M5	M6	M7	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	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	1.1							V
Maximum DC Reverse Current T_a = 25℃ at Rated DC Blocking Voltage T_a = 125℃	I_R	5 50							μA
Typical Junction Capacitance [1]	C_J	15							pF
Typical Thermal Resistance [2]	$R_{\theta JA}$	75							℃/W
Operating and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150							℃

[1] Measured at 1MHz and applied reverse voltage of 4 V D.C.
[2] P.C.B. mounted with 1.0 X 1.0" (2.54 X 2.54 cm) copper pad areas.

Dated : 20/11/2020 JD Rev:01

Electrical Characteristics Curves

Fig.1 Forward Current Derating Curve

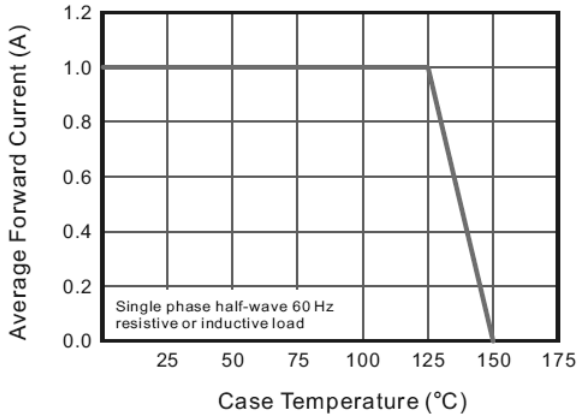


Fig.2 Typical Instaneous Reverse Characteristics

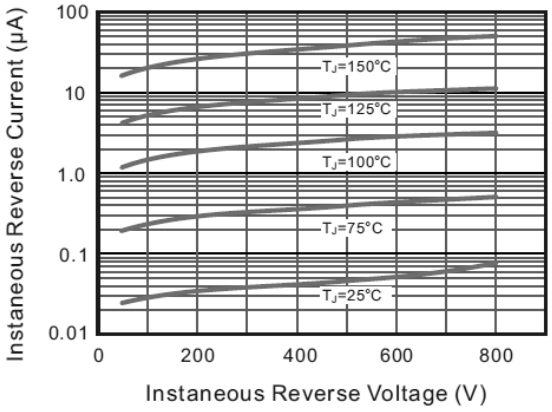


Fig.3 Typical Forward Characteristic

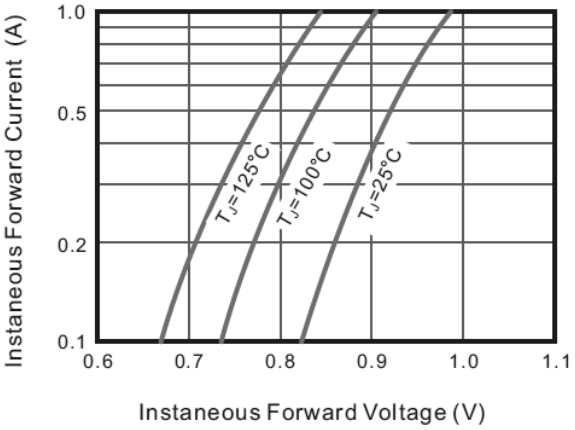


Fig.4 Typical Junction Capacitance

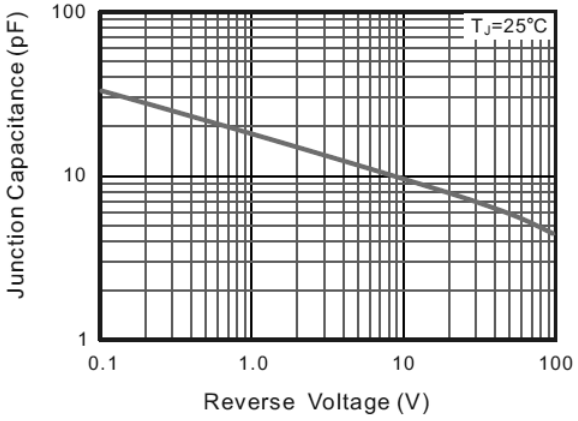
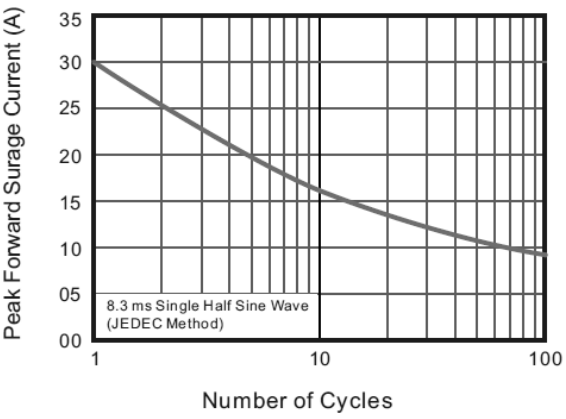
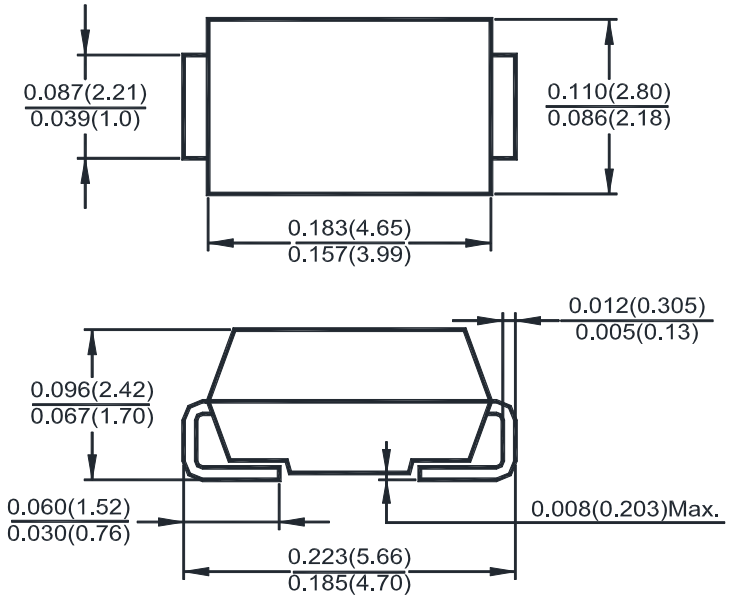


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current



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



Marking information

" ** " = Part No.

" III " = Cathode line

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