

M1D THRU M7D

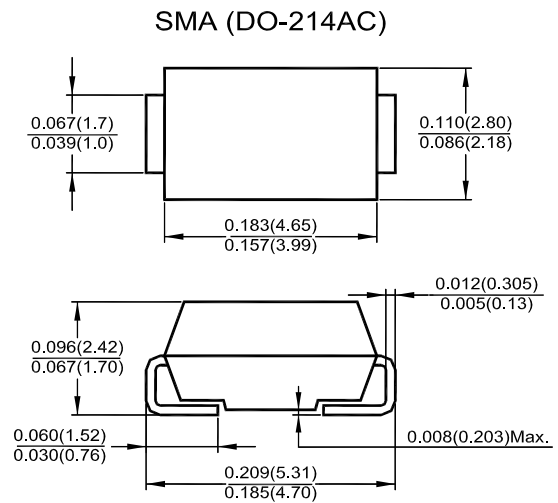
Surface Mount General Purpose Plastic Rectifier Reverse Voltage - 50 to 1000 V Forward Current - 1 A

Features

- For surface mounted applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0

Mechanical Data

- **Case:** SMA (DO-214AC), molded plastic
- **Terminals:** Solder plated, solderable per MIL-STD-750, method 2026
- **Polarity:** Indicated by cathode band

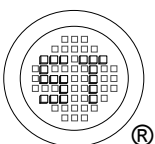


Dimensions in inches and (millimeters)

Absolute Maximum Ratings and Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	M1D	M2D	M3D	M4D	M5D	M6D	M7D	Units
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 at $T_a = 50^\circ\text{C}$	$I_{F(AV)}$	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							V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25^\circ\text{C}$ $T_a = 125^\circ\text{C}$	I_R	5 50							μA
Typical Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	55							$^\circ\text{C/W}$
Typical Thermal Resistance, Junction to Lead	$R_{\theta JL}$	25							$^\circ\text{C/W}$
Junction and Storage Temperature Range	T_J, T_{Stg}	- 55 to + 150							$^\circ\text{C}$

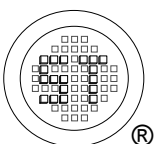
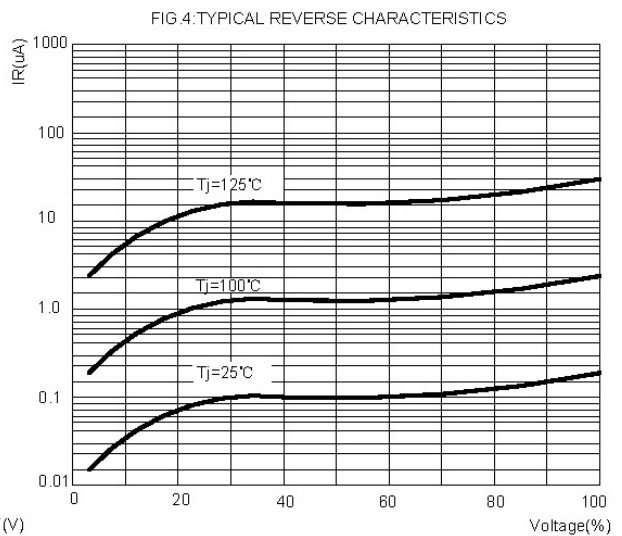
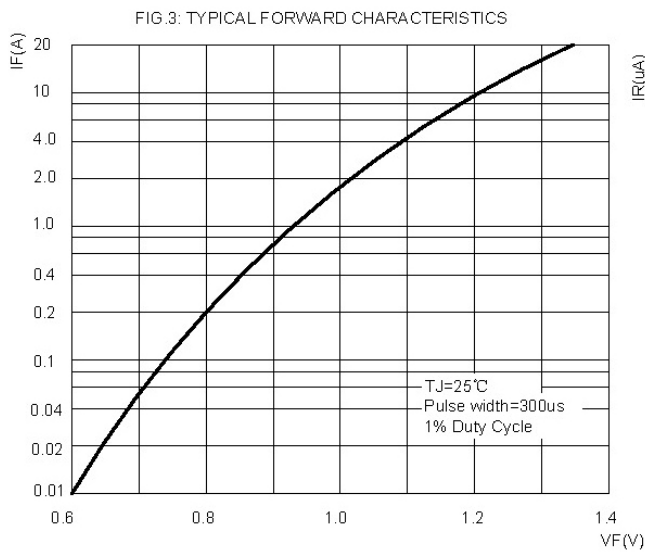
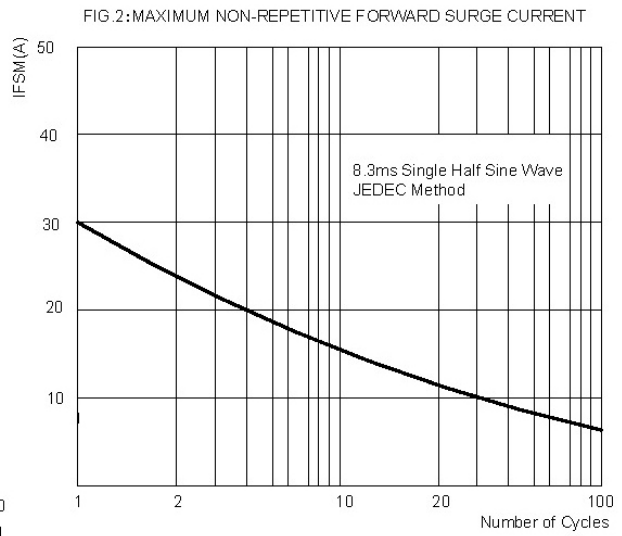
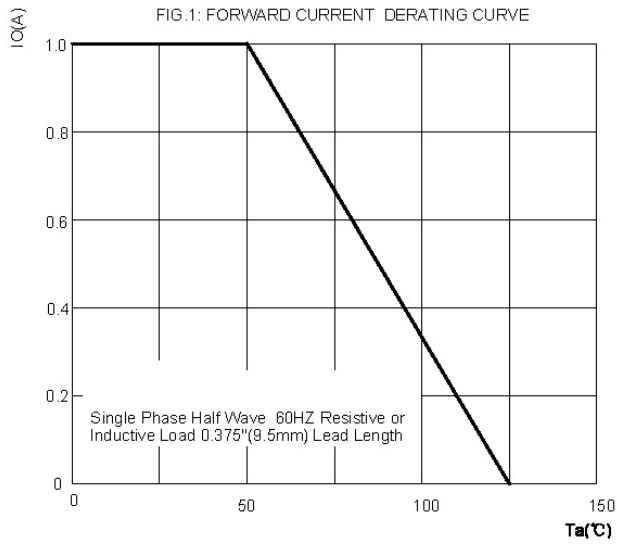


SEMTECH ELECTRONICS LTD.



Dated : 21/09/2015 YJ Rev:03

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SEMTECH ELECTRONICS LTD.



ISO/TS 16949 : 2009
Certificate No. 180713009

ISO14001 : 2004
Certificate No. 7116

ISO 9001 : 2008
Certificate No. 50719410

BS-OHSAS 18001 : 2007
Certificate No. 7116

IECQ QC 080000
Certificate No. PRC-HSPM-1483