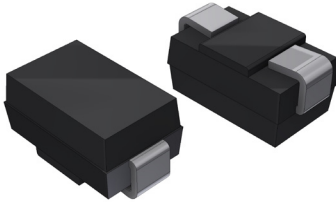


Surface Mount Glass Passivated Rectifier Diode
V_{RRM} 1000 Volts, 1A

multicomp PRO

**RoHS
Compliant**



Features

- For surface mounted applications
- Low reverse leakage current
- Low forward voltage drop
- High surge capacity
- Meet UL flammability classification 94V-0
- Lead free
- Case style: DO-214AC (SMA) molded plastic

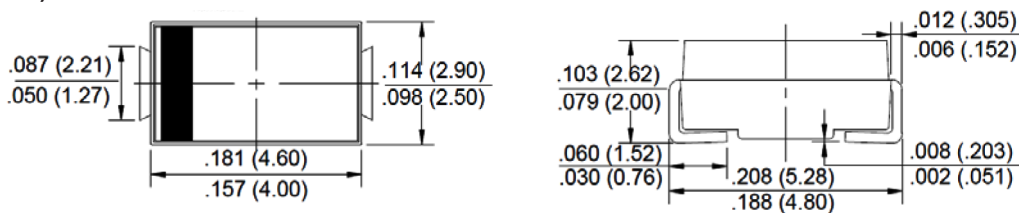
Maximum Ratings and Electrical Characteristics

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

Characteristics	Symbol	Values	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	1000	V
Maximum RMS Voltage	V _{RMS}	700	
Maximum DC Blocking Voltage	V _{DC}	1000	
Maximum Average Forward Rectified Current @ T _L = 100°C	I _(AV)	1	A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I _{FSM}	30	A
I ² t Rating for Fusing (t<8.3mS)	I ² t	3.7	A ² s
Peak Forward Voltage at 1A DC (Note1)	V _F	1.1	V
Max. DC Reverse Current @ T _J =25°C	I _R	5	µA
Rated DC Blocking Voltage @ T _J =100°C		100	
Typical Junction Capacitance (Note 2)	C _J	10	pF
Typical Thermal Resistance Junction to Case	R _{θJC}	30	°C/W
Operating Junction Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}		

- Notes:** 1. 300µS pulse width, 2%duty cycle
 2. Measured at 1 MHz and applied reverse voltage of 4V DC
 3. The typical data above is for reference only.

DO-214AC (SMA)



Dimensions : Inches (Millimetres)

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 Farnell.com/multicomp-pro
 Element14.com/multicomp-pro

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Rating and Characteristic Curves

Fig. 1 - Forward Current Derating Curve

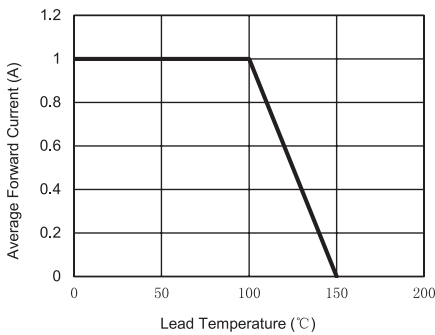


Fig. 2 - Maximum Non-Repetitive Surge Current

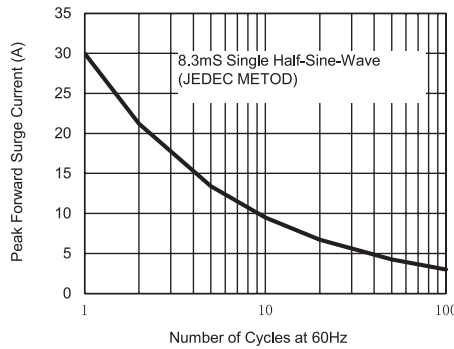


Fig. 3 - Typical Reverse Characteristics

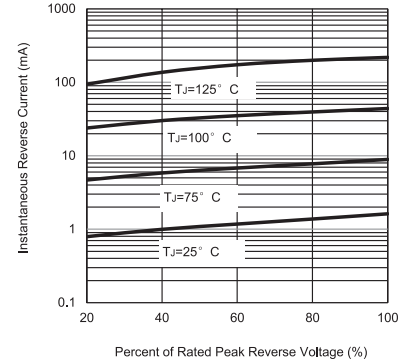


Fig. 4 - Typical Forward Characteristics

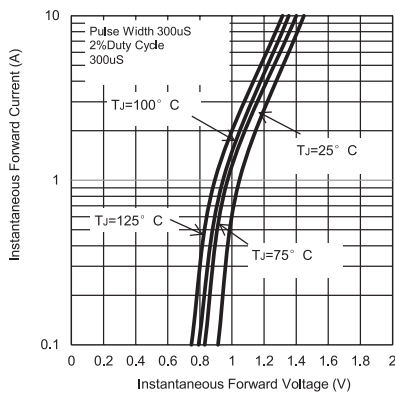
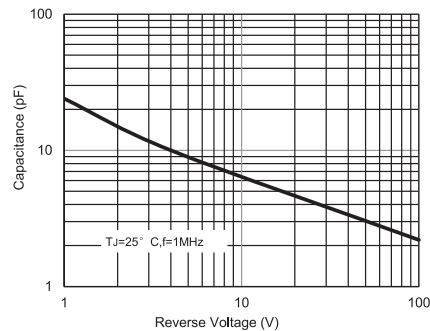


Fig. 5 - Typical Junction Capacitance



Part Number Table

Description	Part Number
Rectifier Diode, 1kV, 1A, DO-214AC (SMA)	1N4007 SMD

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