

Surface Mount Schottky Barrier Rectifiers

Reverse Voltage - 45Volts
Forward Current - 3.0 Amperes

Features

- Low power loss, high efficiency
- For surface mounted applications
- Low forward voltage drop
- High surge capacity
- Meet UL flammability classification 94V-0
- AEC-Q101 qualified

Mechanical Data

- Case: JEDEC SMA molded plastic
- Polarity: Color band denotes cathode
- Mounting position: Any

Applications

- For use in low voltage, high frequency inverters, polarity protection applications

SMA

RoHS COMPLIANT

Package Outline Dimensions in Inches (Millimeters)

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	SS345A	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	45	V
Maximum RMS Voltage	V _{RMS}	31.5	V
Maximum DC Blocking Voltage	V _{DC}	45	V
Maximum Average Forward Rectified Current @T _L =100 °C	I(AV)	3.0	A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I _{FSM}	80	A
I ² t Rating for Fusing (t<8.3mS)	I ² t	26.7	A ² s
Peak Forward Voltage at 3.0A DC (Note1)	V _F	0.55	V
Maximum DC Reverse Current @T _J =25°C at Rated DC Blocking Voltage @T _J =100°C	I _R	1.0 20	mA
Typical Junction Capacitance (Note 2)	C _J	250	pF
Typical Thermal Resistance Junction to Lead	R _{θJL}	10	°C/W
Typical Thermal Resistance Junction to Ambient	R _{θJA}	50	°C/W
Junction Temperature Range	T _J	-55 to+150	°C
Storage Temperature Range	T _{STG}	-55 to+150	°C

Notes: 1. 300uS pulse width, 2%duty cycle.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
3. The typical data above is for reference only .

Fig. 1 - Forward Current Derating Curve

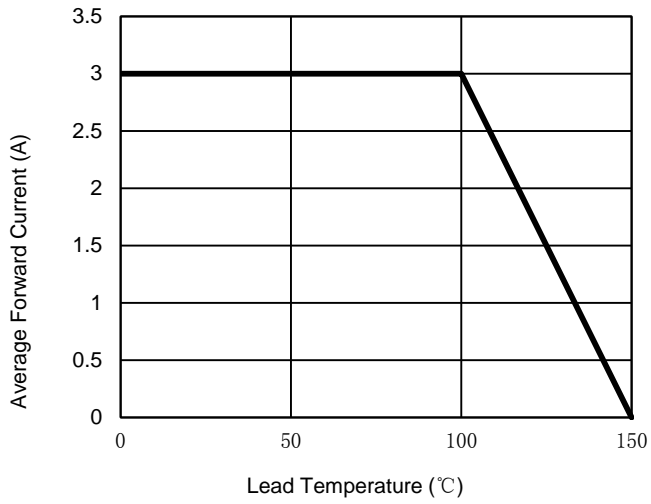


Fig. 2 - Maximum Non-Repetitive Surge Current

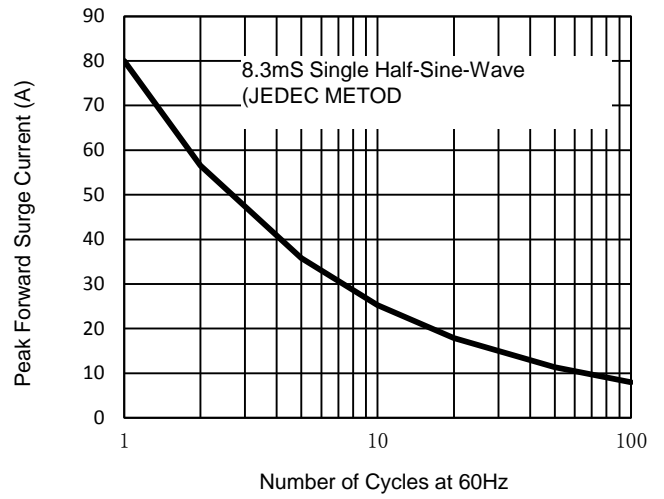


Fig. 3 - Typical Reverse Characteristics

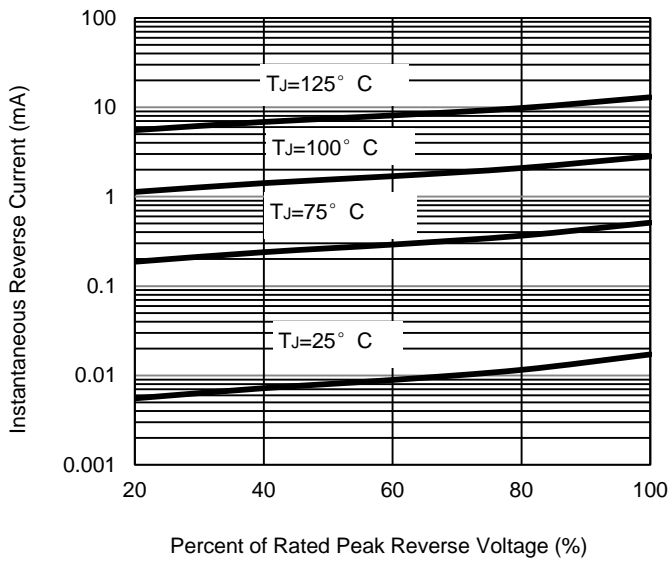
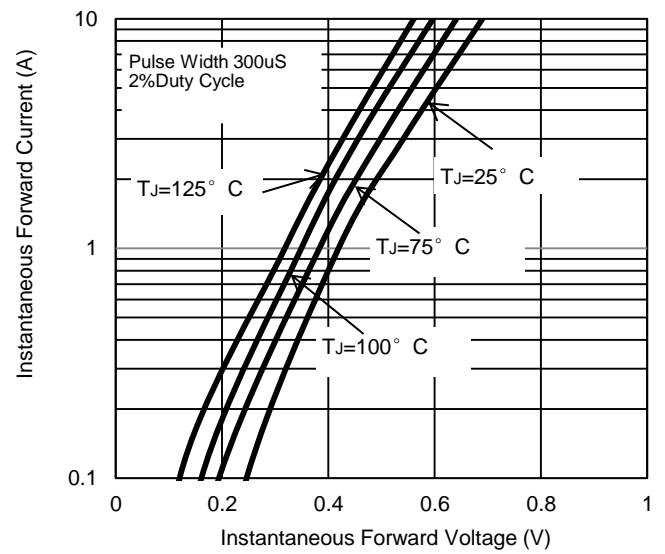


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only.

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