



Features

- Metal-semiconductor junction with guarding
- Epitaxial construction
- Low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

Specifications

Reverse Voltage : 40V
Forward Current : 5 Amperes
Case : Moulded plastic.
Polarity : Colour band denotes cathode.
Weight : 0.007 oz, 0.21 g.

Maximum Ratings and Electrical Characteristics

Rating 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%.

Characteristics	Symbol	Values	Unit
Max. Recurrent Peak Reverse Voltage	V _{RRM}	40	V
Max. RMS Voltage	V _{RMS}	28	
Max. DC Blocking Voltage	V _{DC}	40	
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Lengths at T _L = 95°C	I _(AV)	5	A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	150	
Max. Forward Voltage at 5A DC	V _F	0.55	V
Max. DC Reverse Current at T _J = 25°C Rated DC Blocking Voltage at T _J = 100°C	I _R	1 50	mA
Typical Junction Capacitance (Note 1)	C _J	500	pF
Typical Thermal Resistance (Note 2)	R _{θJA}	15	°C / W
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{STG}	-55 to +150	

Notes : 1. Measured at 1MHz and applied reverse voltage of 4 V DC.
2. Thermal resistance junction to ambient.

Rating and Characteristics Curves

Figure 1 - Forward Current Derating Curve

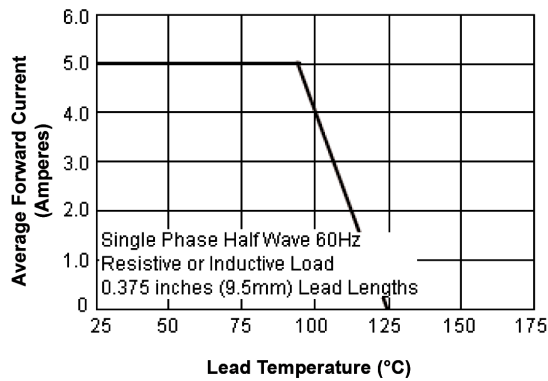
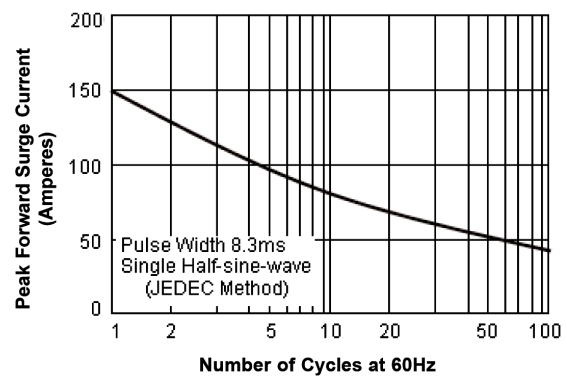
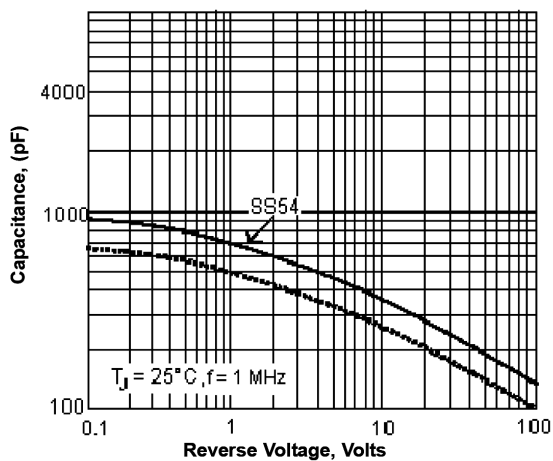


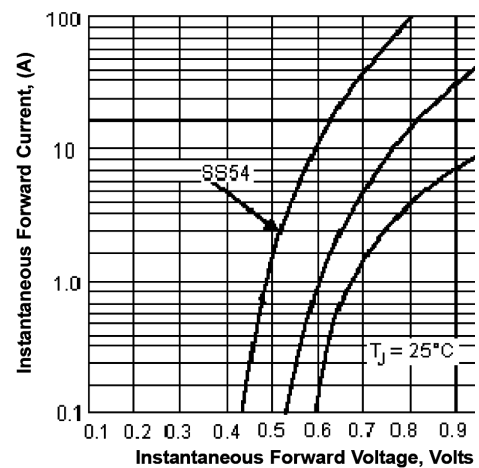
Figure 2 - Maximum Non-repetitive Surge Current



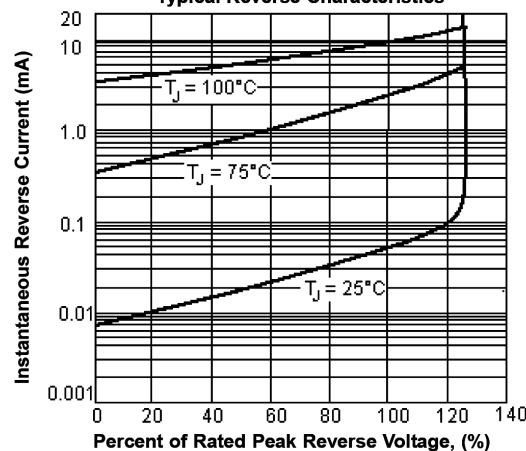
Typical Junction Capacitance



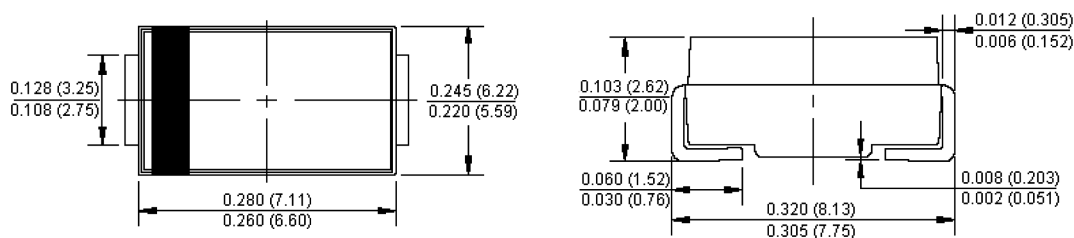
Typical Forward Characteristics



Typical Reverse Characteristics



DO-214AB (SMC)



Dimensions : Millimetres

Part Number Table

Description	Part Number
Schottky Rectifier, 40V, 5A, Single, DO-214AB (SMC)	SS54

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