

Schottky Barrier Rectifiers **multicomp**PRO



Features

- Metal-semiconductor junction with guard ring
- Epitaxial construction
- Low forward voltage drop
- High current capability
- For use in low voltage, high frequency inverters, free wheeling and polarity protection applications

Specifications

Reverse Voltage : 20 Volts to 100 Volts
 Forward Current : 1 Amperes

Mechanical Data

Case : JEDEC DO-41 moulded plastic
 Polarity : Colour band denotes cathode
 Weight : 0.012 ounces, 0.34 grams
 Mounting Position : Any

Max. 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	SR150	SR160	SR1100	Unit
Max. Recurrent Peak Reverse Voltage	V _{RRM}	50	60	100	V
Max. RMS Voltage	V _{RMS}	35	42	70	
Max. DC Blocking Voltage	V _{DC}	50	60	100	
Max. Average Forward Rectified Current 0.375" (9.5mm) Lead Lengths @ _{T_L} = 100°C	I _(AV)	1			A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	40			A
Peak Forward Voltage at 1A DC	V _F	0.7		0.85	V
Max. DC Reverse Current @ _{T_J} = 25°C at Rated DC Blocking Voltage @ _{T_J} = 100°C	I _R	1			mA
		10			
Typical Junction Capacitance (Note 1)	C _J	80			pF
Typical Thermal Resistance (Note 2)	R _{θJL}	15			°C/W
Operating Temperature Range	T _J	-55 to +125			°C
Storage Temperature Range	T _{STG}	-55 to +150			°C

Notes:

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

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Rating and Characteristic Curves

Figure 1 - Forward Current Derating Curve

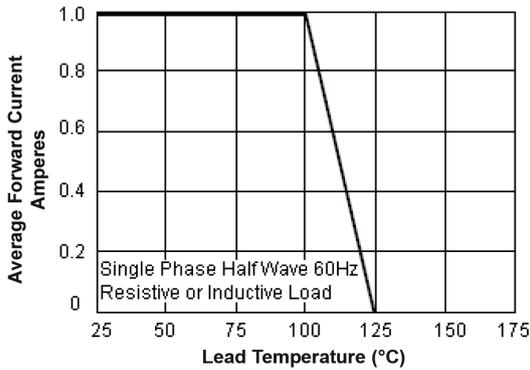


Figure 2 - Maximum Non-repetitive Surge Current

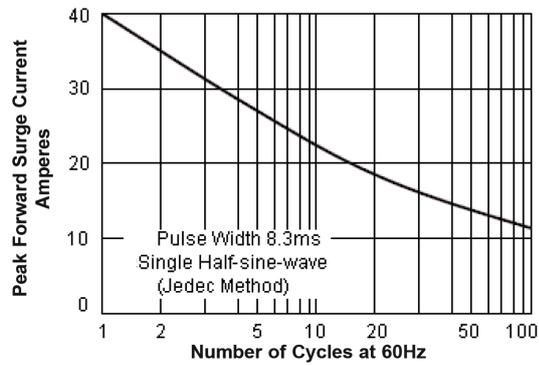


Figure 3 - Typical Junction Capacitance

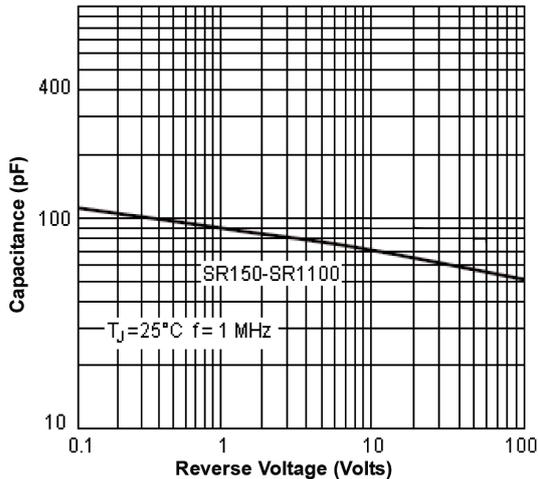


Figure 4 - Typical Forward Characteristics

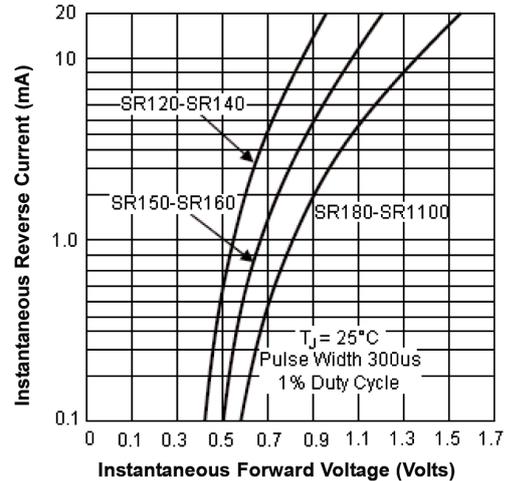
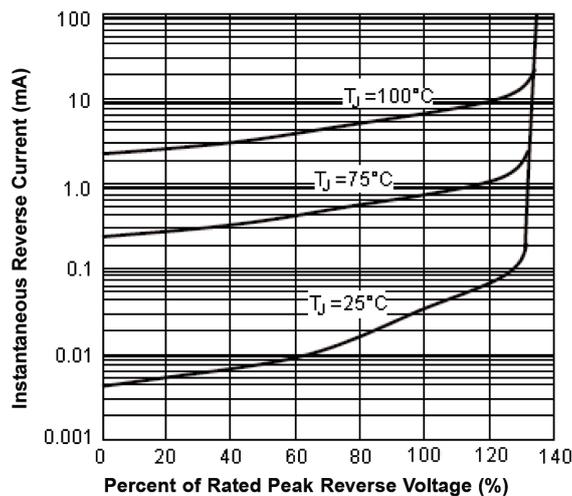
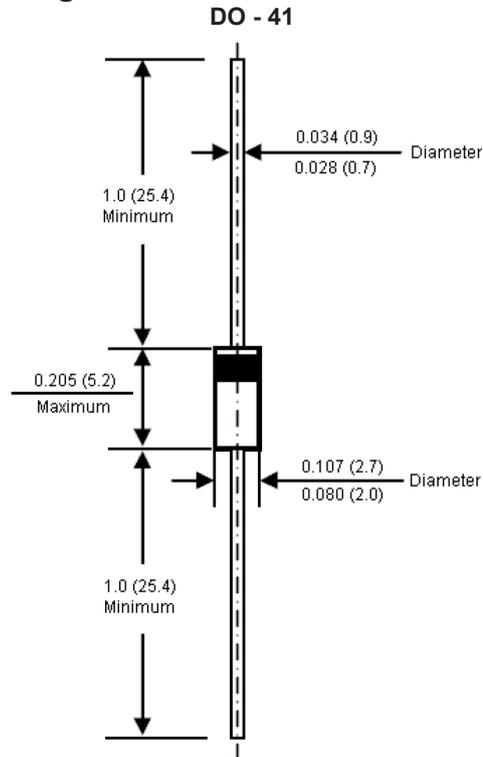


Figure 5 - Typical Reverse Characteristics



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Diagram



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Schottky Barrier Rectifier, 100V	SR1100
Schottky Barrier Rectifier, 50V	SR150
Schottky Barrier Rectifier, 60V	SR160

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