

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

Schottky Barrier Rectifiers **multicomp**PRO

Rating and Characteristic Curves

Figure 1 - Forward Current Derating Curve

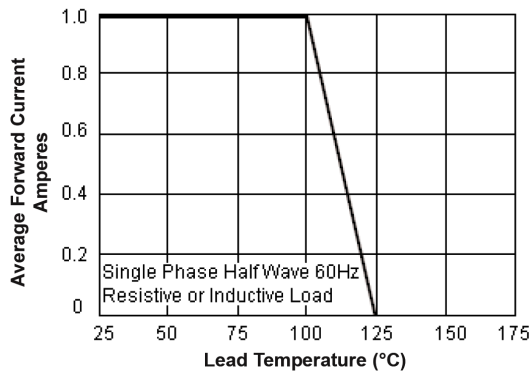


Figure 2 - Maximum Non-repetitive Surge Current

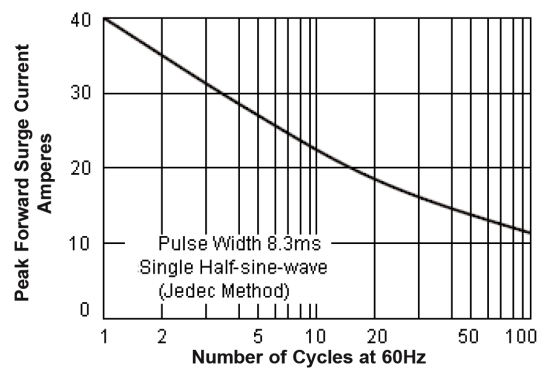


Figure 3 - Typical Junction Capacitance

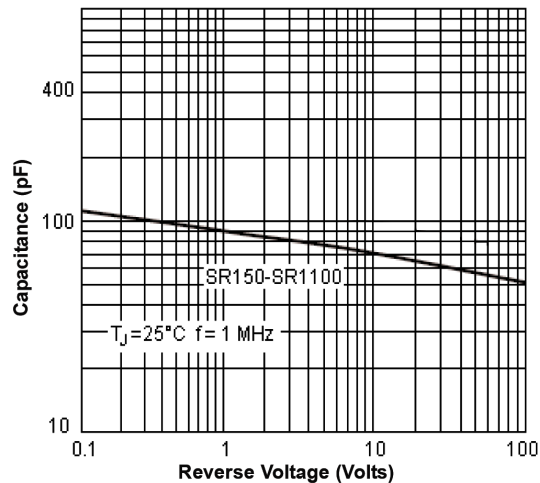


Figure 4 - Typical Forward Characteristics

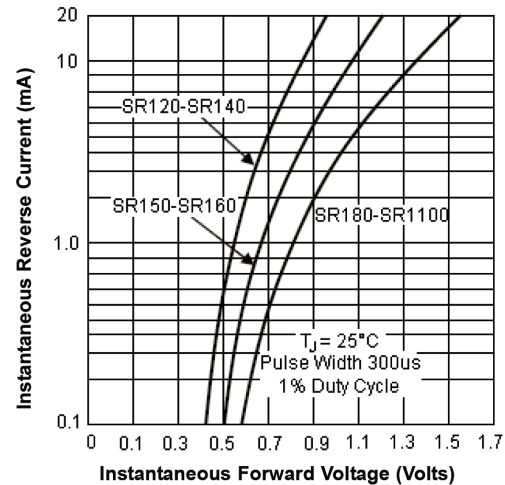
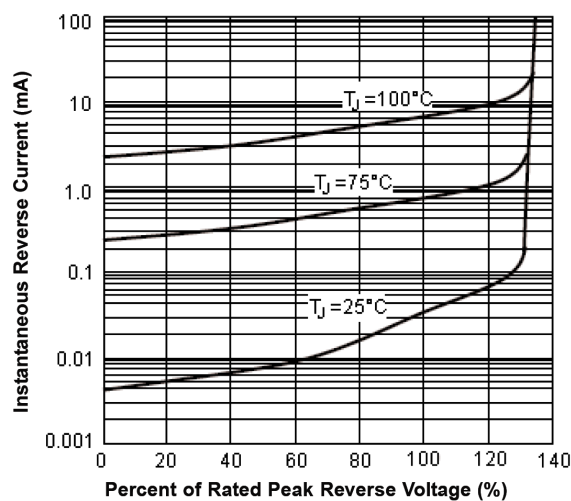
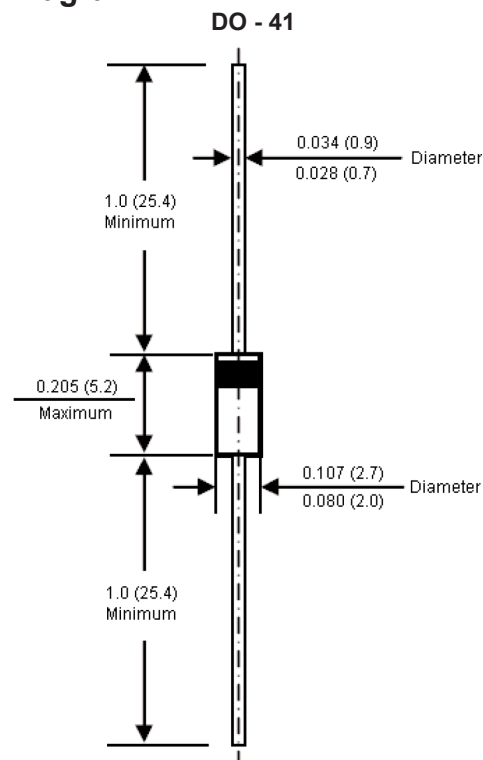


Figure 5 - Typical Reverse Characteristics



Schottky Barrier Rectifiers **multicomp**PRO

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

Important Notice : This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.

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

multicompPRO