



## Features:

- Metal-Semiconductor junction with guard ring
- Epitaxial construction
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

## Mechanical Data:

Case	: JEDEC DO-41 molded plastic
Polarity	: Colour band denotes cathode
Weight	: 0.012 ounces, 0.34 grams
Mounting Position	: Any
Reverse Voltage	: 40 to 60 Volts
Forward Current	: 1 Ampere

## 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	SR140	SR160	Unit
Max. Recurrent Peak Reverse Voltage	$V_{RRM}$	40	60	V
Max. RMS Voltage	$V_{RMS}$	28	42	
Max. DC Blocking Voltage	$V_{DC}$	40	60	
Max. Average Forward Rectified Current 0.375" (9.5mm) Lead Lengths @ $T_L = 100^\circ C$	$I_{(AV)}$	1.0		A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	$I_{FSM}$	30		
Peak Forward Voltage at 1A DC	$V_F$	0.55	0.7	V
Max. DC Reverse Current at $T_J = 25^\circ C$ Rated DC Blocking Voltage at $T_J = 100^\circ C$	$I_R$	1 10		mA
Typical Junction Capacitance (Note 1)	$C_J$	110	80	pF
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	15		$^\circ C/W$
Operating Temperature Range	$T_J$	-55 to +150		$^\circ C$
Storage Temperature Range	$T_{STG}$			

## Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal resistance junction to lead
3. The typical data above is for reference only

## Ratings and Characteristic Curves

FIG. 1 – FORWARD CURRENT DERATING CURVE

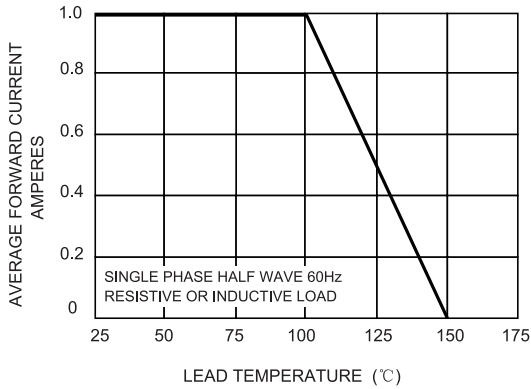


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

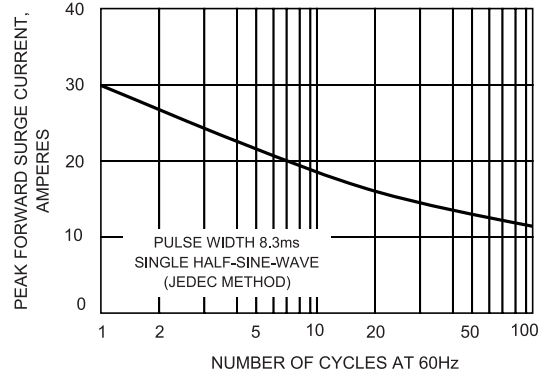


FIG. 3 – TYPICAL JUNCTION CAPACITANCE

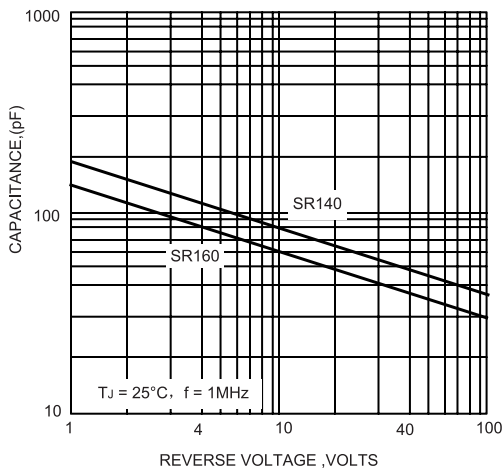


FIG.4-TYPICAL FORWARD CHARACTERISTICS

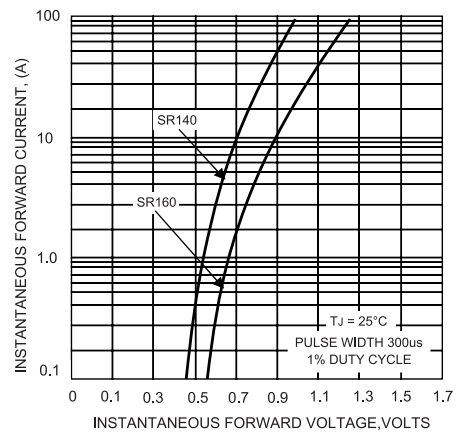
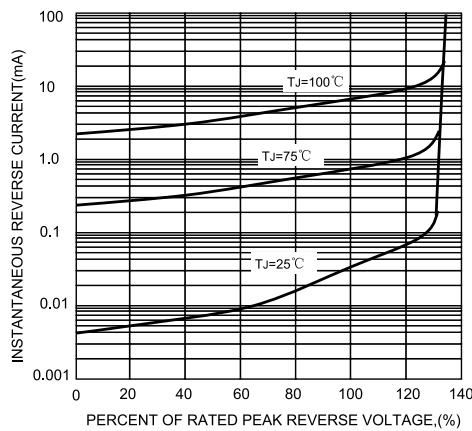
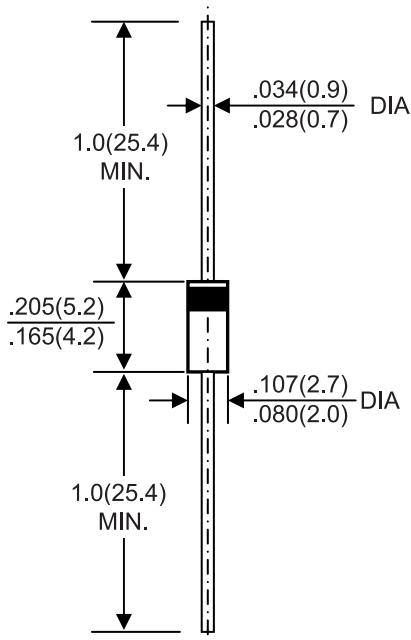


FIG.5-TYPICAL REVERSE



## Dimensions:

**DO-41**



Dimensions : Inches (Millimetres)

## Part Number Table

Description	Part Number
Schottky Barrier Rectifier, 1A 40V, DO-41	SR140
Schottky Barrier Rectifier, 1A 60V, DO-41	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