

# Surface Mount Schottky Barrier Rectifier



## Features:

- For surface mounted applications
- Metal-Semiconductor junction with guarding
- Epitaxial construction
- Very 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.

## Mechanical Data:

Case	: Molded Plastic
Polarity	: Colour band denotes cathode
Weight	: 0.002 ounces, 0.053 grams
Reverse Voltage	: 30 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	Values	Unit
Max. Recurrent Peak Reverse Voltage	$V_{RRM}$	30	V
Max. RMS Voltage	$V_{RMS}$	21	
Max. DC Blocking Voltage	$V_{DC}$	30	
Max. Average Forward Rectified Current $T_L = 100^\circ\text{C}$	$I_{(AV)}$	1	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	V
Max. DC Reverse Current at $T_J = 25^\circ\text{C}$ Rated DC Blocking Voltage at $T_J = 125^\circ\text{C}$	$I_R$	1 10	$\mu\text{A}$
Typical Junction Capacitance (Note 1)	$C_J$	110	pF
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	20	$^\circ\text{C/W}$
Operating Temperature Range	$T_J$	-55 to + 150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$		

## Notes:

1. Measured at 1MHz and applied reverse voltage of 4V DC.
2. Thermal resistance junction to lead.
3. The typical data above is for reference only

# Surface Mount Schottky Barrier Rectifier



## Ratings and Characteristic Curves

FIG. 1 - FORWARD CURRENT DERATING CURVE

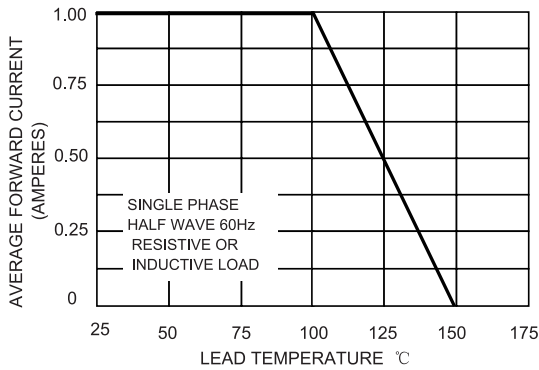


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

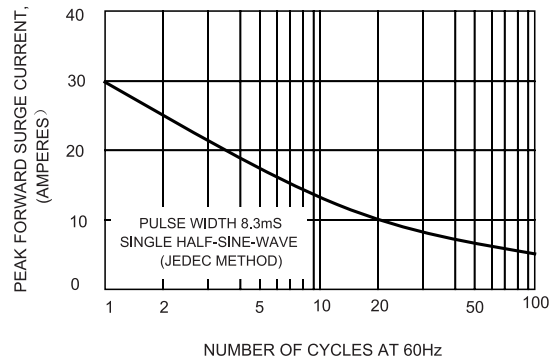


FIG.3-TYPICAL FORWARD CHARACTERISTICS

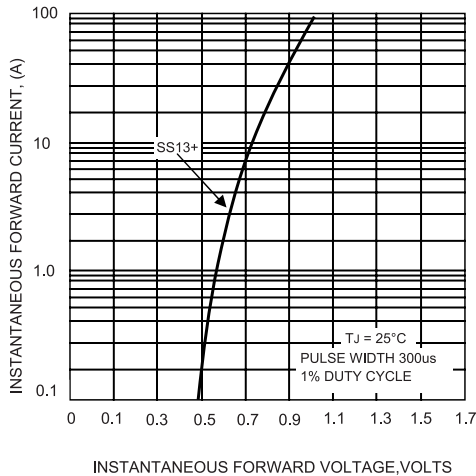


FIG.4-TYPICAL JUNCTION CAPACITANCE

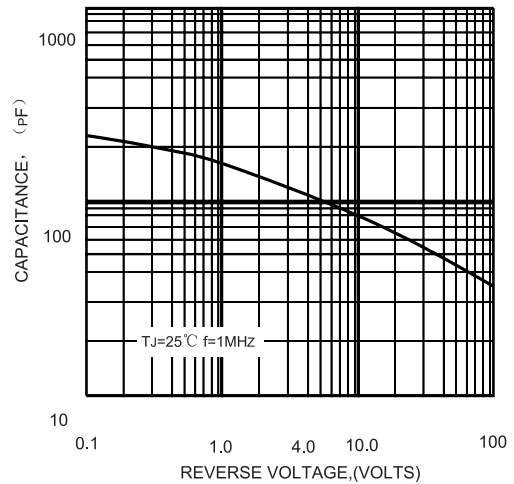
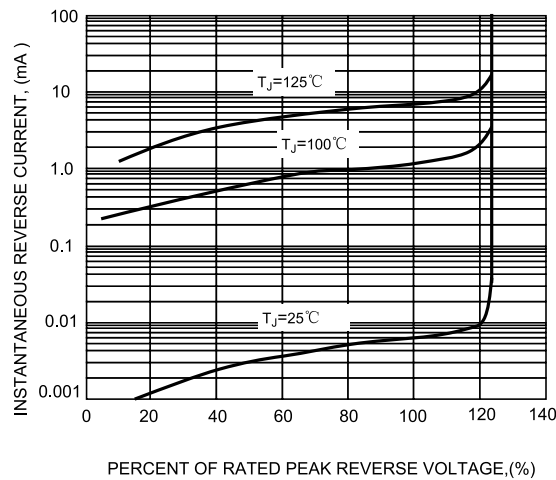


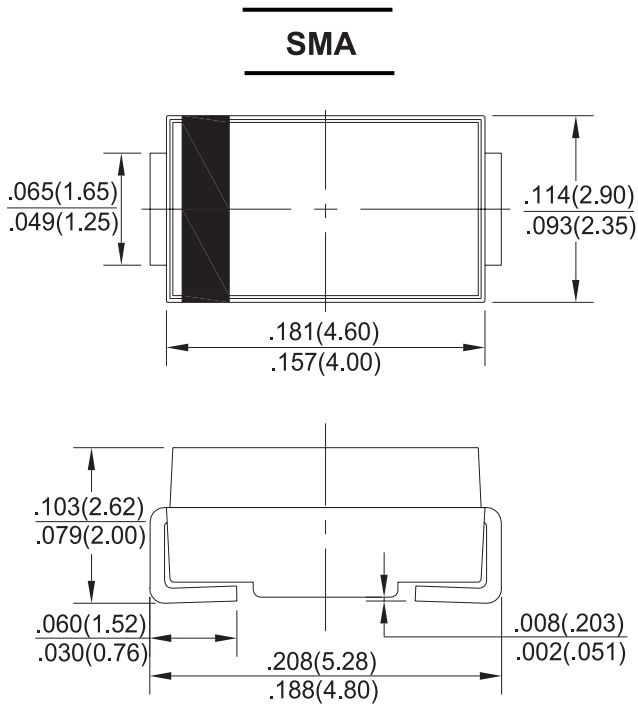
FIG.5-TYPICAL REVERSE CHARACTERISTICS



# Surface Mount Schottky Barrier Rectifier



## Dimensions:



Dimensions : Inches (Millimetres)

## Part Number Table

Description	Part Number
Surface Mount Schottky Barrier Rectifiers, 1A 30V SMA	SS13+

**Important Notice :** This data sheet and its contents (the "Information") belong to the members of the Premier Farnell 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 is the registered trademark of the Group. © Premier Farnell Limited 2016.

www.element14.com  
www.farnell.com  
www.newark.com

