

# Central<sup>TM</sup> Semiconductor Corp.

145 Adams Avenue, Hauppauge, NY 11788 USA  
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Manufacturers of World Class Discrete Semiconductors

1N5817  
1N5818  
1N5819

SCHOTTKY BARRIER RECTIFIER  
JEDEC DO-41 CASE

## DESCRIPTION

The CENTRAL SEMICONDUCTOR 1N5817 Series types are Schottky Barrier Rectifiers mounted in an axial lead epoxy case using a metal to silicon junction to yield low forward voltage drop and instantaneous reverse recovery times.

## MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ unless otherwise noted)

	SYMBOL	1N5817	1N5818	1N5819	UNIT
Peak Repetitive Reverse Voltage	$V_{RRM}$	20	30	40	V
DC Blocking Voltage	$V_R$	20	30	40	V
RMS Reverse Voltage	$V_R(\text{RMS})$	14	21	28	V
Average Forward Surge Current ( $T_L=100^\circ\text{C}$ )	$I_O$		1.0		A
Peak Forward Surge Current	$I_{FSM}$		25		A
Operating and Storage Junction Temperature	$T_J, T_{STG}$		-65 TO +150		$^\circ\text{C}$

## ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	1N5817		1N5818		1N5819		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	
$I_R$	$V_R=V_{RRM}$		1.0		1.0		1.0	mA
$I_R$	$V_R=V_{RRM}, T_A=100^\circ\text{C}$		10		10		10	mA
$V_F$	$I_F=0.1\text{A}$		0.320		0.330		0.340	V
$V_F$	$I_F=1.0\text{A}$		0.450		0.550		0.600	V
$V_F$	$I_F=3.1\text{A}$		0.750		0.875		0.900	V

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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### REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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### CONTACT US

#### Corporate Headquarters & Customer Support Team

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