**Central**Semiconductor Corp.

145 Adams Avenue, Hauppauge, NY 11788 USA Tel: (631) 435-1110 • Fax: (631) 435-1824

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 (TA=25°C unless otherwise noted)

	SYMBOL	185817	1N5818	1N5819	UNIT
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	20	30	40	V
DC Blocking Voltage	VR	20	30	40	ν
RMS Reverse Voltage	VR(RMS)	14	21	28	V
Average Forward Surge Current $(T_1 = 100^{\circ}C)$	10		1.0		Α
Peak Forward Surge Current Operating and Storage	IFSM		25		Α
Junction Temperature	$T_J, T_{STG}$		-65 TO +15	50	°C

# ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	1N5817	1N5818	1N5819	
		MIN MAX	MIN MAX	MIN MAX UNIT	
IR	$V_{R}=V_{RRM}$	1.0	1.0	1.0 mA	
I <sub>R</sub>	V <sub>R</sub> =V <sub>RRM</sub> , T <sub>A</sub> =100°C	10	10	10 mA	
٧ <sub>F</sub>	IF=0.1A	0.320	0.330	0.340 V	
٧F	I <sub>F</sub> =1.0A	0.450	0.550	0.600 V	
٧ <sub>F</sub>	I <sub>F</sub> =3.1A	0.750	0.875	0.900 V	

## **OUTSTANDING SUPPORT AND SUPERIOR SERVICES**



#### 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

#### **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

#### 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).

#### **CONTACT US**

## Corporate Headquarters & Customer Support Team

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