

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

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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<br>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    |