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# 1N5817, 1N5818, 1N5819
# Schottky Barrier Rectifier
# DO–41 Type Package

**Absolute Maximum Ratings:** ($T_A$ = +25°C, Note 1 unless otherwise specified)

Maximum Repetitive Reverse Voltage, $V_{RRM}$
- 1N5817 . . . . . 20V
- 1N5818 . . . . . 30V
- 1N5819 . . . . . 40V

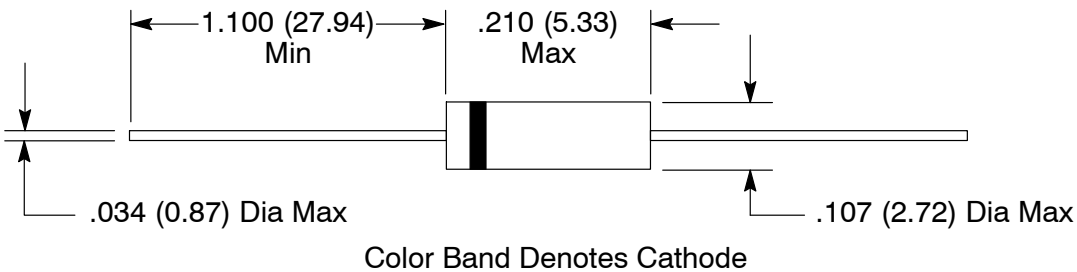
Average Forward Rectified Current (.375" (9.5mm) lead length at $T_L$ = +90°C), $I_{F(AV)}$ . . . . . 1.0A
Non–Repetitive Peak Surge Current (8.3ms single half sine–wave), $I_{FSM}$ . . . . . 25A
Power Dissipation, $P_D$ . . . . . .1.25W
Operating Junction Temperature Range $T_J$ . . . . . –65° to +125°C
Storage Temperature Range $T_{stg}$ . . . . . –65° to +125°C
Maximum Thermal Resistance, Junction–to–Ambient (Note 2), $R_{thJA}$ . . . . . 100°C/W
Maximum Thermal Resistance, Junction–to–Case (Note 2), $R_{thJC}$ . . . . . 45°C/W

Note 1. These ratings are limiting values above which the serviceability of the device may be impaired.
Note 1. Mounted on Cu–pad Size 5mm x 5mm on PCB.

**Electrical Characteristics:** (Per Diode)

| Parameter | Symbol | Test Conditions | | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|---|
| Forward Voltage | | | | | | | |
| 1N5817 | $V_F$ | $I_F$ = 1A | | – | – | 450 | mV |
| 1N5818 | | | | – | – | 550 | mV |
| 1N5819 | | | | – | – | 600 | mV |
| 1N5817 | | $I_F$ = 3A | | – | – | 750 | mV |
| 1N5818 | | | | – | – | 875 | mV |
| 1N5819 | | | | – | – | 900 | mV |
| Reverse Current | $I_R$ | At rated $V_R$ | $T_C$ = +25°C | – | – | 0.5 | mA |
| | | | $T_C$ = +100°C | – | – | 10 | mA |
| Total Capacitance | $C_T$ | $V_R$ = 4V, f = 1MHz | | – | – | 110 | pF |

Note 3. Pulse test: Pulse Width = 300μs, Duty Cycle = 2%.




Color Band Denotes Cathode