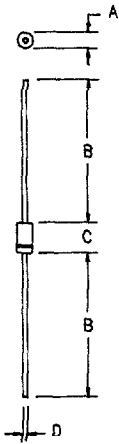


1 Amp Schottky Rectifier 1N5817, 1N5818, 1N5819



| Dim. | Inches | | Millimeter | | Notes |
|------|---------|---------|------------|---------|-------|
| | Minimum | Maximum | Minimum | Maximum | |
| A | .081 | .107 | 2.057 | 2.718 | Dia. |
| B | 1.10 | --- | 27.94 | --- | |
| C | .160 | .205 | 4.064 | 5.207 | |
| D | .028 | .034 | .711 | .864 | Dia. |

PLASTIC D041

| Microsemi Catalog Number | Working Peak Reverse Voltage | Repetitive Peak Reverse Voltage | |
|--------------------------|------------------------------|---------------------------------|---|
| 1N5817 | 20V | 20V | <ul style="list-style-type: none"> • Schottky Barrier Rectifier • Guard Ring Protection • Low Forward Voltage • High Reliability • High Current Capability |
| 1N5818 | 30V | 30V | |
| 1N5819 | 40V | 40V | |

| Electrical Characteristics | | | | | |
|------------------------------|--------------------|--------|--------|--------|--|
| | | 1N5817 | 1N5818 | 1N5819 | |
| Average forward current | I _{F(AV)} | 1A | 1A | 1A | <i>R</i> _{θJL} = 35°C/W, L = 0" <i>R</i> _{θJL} = 68°C/W, L = 3/8" 8.3ms, half sine, T _J = 150°C I _{FM} = 0.1A; T _J = 25°C* I _{FM} = 1.0A; T _J = 25°C* I _{FM} = 3.0A; T _J = 25°C* V _{RRM} , T _J = 25°C V _R = 5.0V, T _J = 25°C |
| Ambient Temperature | | 135°C | 130°C | 130°C | |
| Ambient Temperature | | 120°C | 112°C | 112°C | |
| Maximum surge current | I _{FSM} | 50A | 50A | 50A | |
| Max peak forward voltage | V _{FM} | .32V | .37V | .37V | |
| Max peak forward voltage | V _{FM} | .45V | .55V | .55V | |
| Max peak forward voltage | V _{FM} | .65V | .85V | .85V | |
| Max peak reverse current | I _{RM} | 1mA | 1mA | 1mA | |
| Typical junction capacitance | C _J | 105pF | 50pF | 50pF | |

*Pulse test: Pulse width 300 μsec, Duty cycle 2%

| Thermal and Mechanical Characteristics | | | |
|--|----------|-------------------------|----------------------------------|
| Storage temperature range | | T _{STC} | -40°C to 150°C |
| Operating junction temp range | | T _J | -40°C to 150°C |
| Maximum thermal resistance | L = 3/8" | <i>R</i> _{θJL} | 68°C/W Junction to Lead |
| | L = 0 | <i>R</i> _{θJL} | 35°C/W Junction to Lead |
| Weight | | | .011 ounces (0.34 grams) typical |

Microsemi Corp.
Colorado

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FAX: 303-466-3775

1N5817

Figure 1
Typical Forward Characteristics

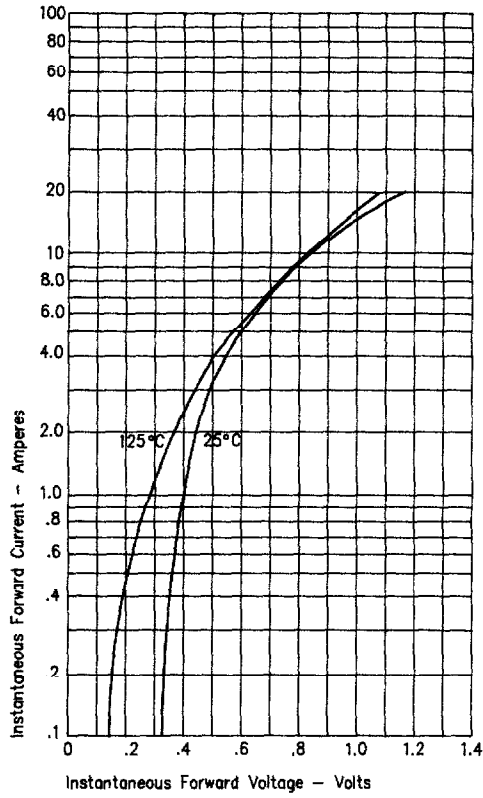


Figure 3
Typical Junction Capacitance

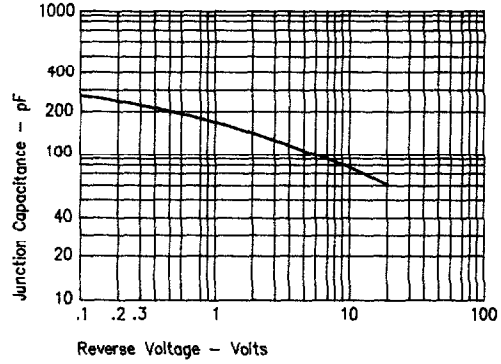
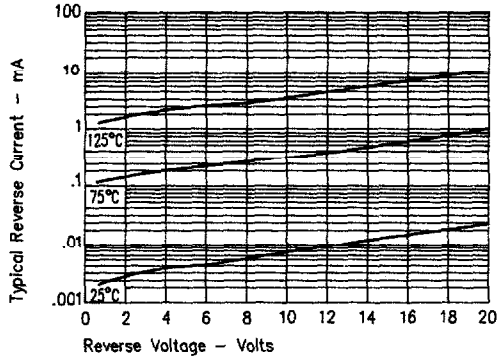


Figure 2
Typical Reverse Characteristics



1N5818 & 1N5819



Figure 1
Typical Forward Characteristics

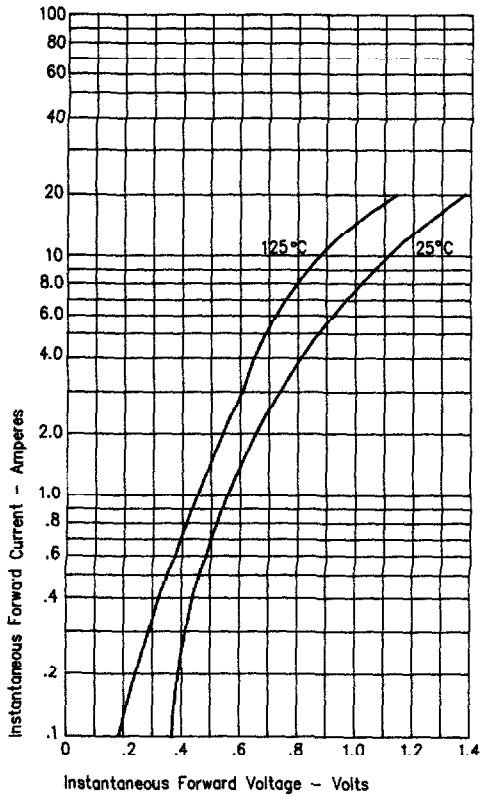


Figure 3
Typical Junction Capacitance

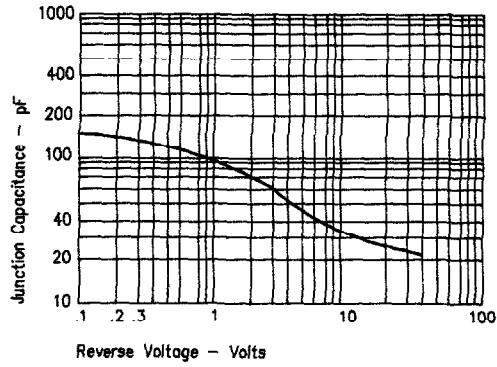


Figure 2
Typical Reverse Characteristics

