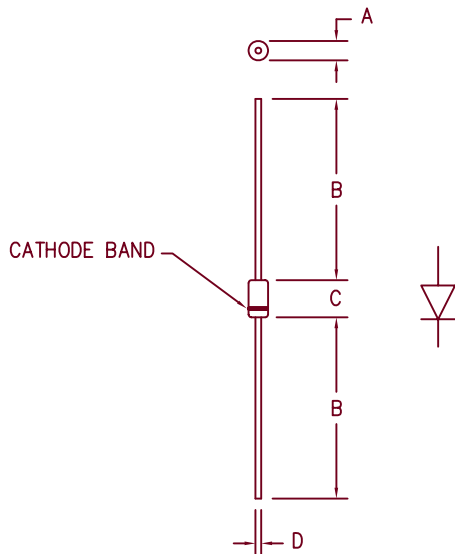


8 Amp Schottky Rectifier MSP835, MSP845



| Dim. | Inches | | Millimeter | | Notes |
|------|---------|---------|------------|---------|-------|
| | Minimum | Maximum | Minimum | Maximum | |
| A | .188 | .260 | 4.78 | 6.50 | Dia. |
| B | 1.00 | --- | 25.4 | --- | |
| C | .285 | .375 | 7.24 | 9.52 | |
| D | .046 | .056 | 1.17 | 1.42 | Dia. |

PLASTIC D0201AD

| Microsemi Catalog Number | Working Peak Reverse Voltage | Repetitive Peak Reverse Voltage |
|--------------------------|------------------------------|---------------------------------|
| MSP835 | 35V | 35V |
| MSP845 | 45V | 45V |

- Schottky Barrier Rectifier
- Guard Ring Protection
- Low Forward Voltage
- 150°C Junction Temperature
- High Current Capability
- V_{RR} 35 to 45 Volts

Electrical Characteristics

| | | |
|------------------------------|-----------------------------|--|
| Average forward current | I _{F(AV)} 8.0 Amps | T _A = 112°C Square wave, R _{θJL} = 9.0°C/W, L = 3/8" |
| Maximum surge current | I _{F(AV)} 400 Amps | |
| Max peak forward voltage | V _{FM} .40 Volts | 8.3 ms, half sine, T _J = 150°C |
| Max peak forward voltage | V _{FM} .52 Volts | I _{FM} = 8.0A: T _J = 150°C * |
| Max peak reverse current | I _{RM} 2 mA | I _{FM} = 8.0A: T _J = 25°C * |
| Typical junction capacitance | C _J 575 pF | V _{RRM} , T _J = 25°C |
| | | V _R = 5.0V, T _J = 25°C |

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

Thermal and Mechanical Characteristics

| | | |
|-------------------------------|---------------------------|---------------------------------|
| Storage temperature range | T _{STG} | -55°C to 150°C |
| Operating junction temp range | T _J | -55°C to 150°C |
| Maximum thermal resistance | L = 3/8" R _{θJL} | 9.0°C/W Junction to lead |
| Weight | | .032 ounces (1.0 grams) typical |



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05-25-07 Rev. 2

MSP835, MSP845

Figure 1
Typical Forward Characteristic

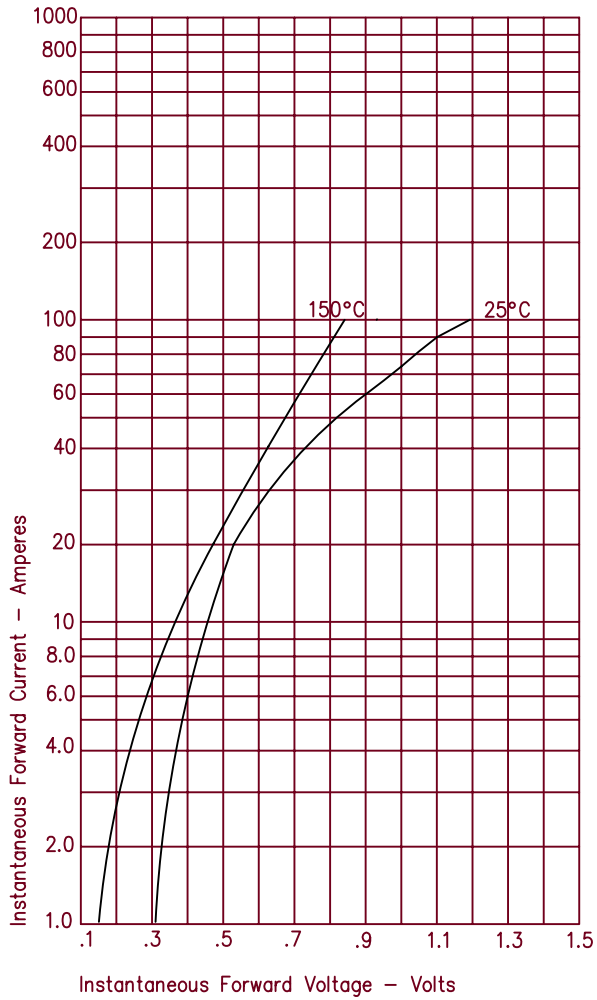


Figure 3
Typical Junction Capacitance

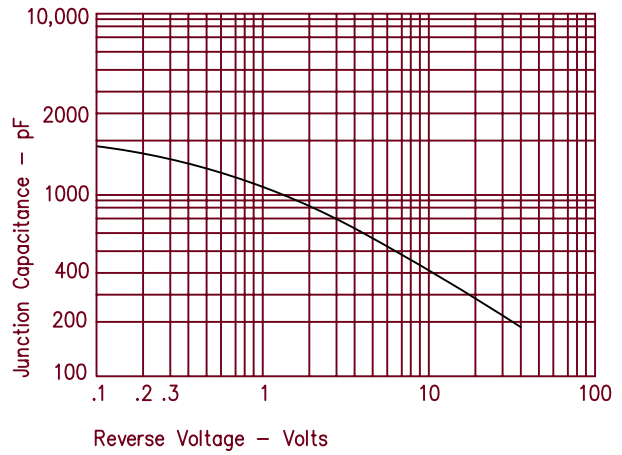


Figure 2
Typical Reverse Characteristics

