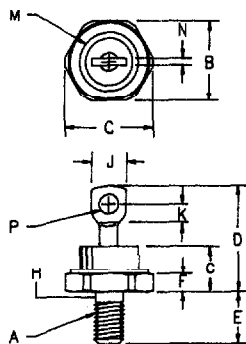


Silicon Power Rectifier

S/R35



- Notes:
1. 1/4-28
 2. Full threads within 2 1/2 threads
 3. Standard polarity:
Stud is cathode
Reverse polarity:
Stud is anode

| Dim. | Inches | | Millimeter | | Notes |
|------|---------|---------|------------|---------|-------|
| | Minimum | Maximum | Minimum | Maximum | |
| A | ---- | ---- | ---- | ---- | 1 |
| D | .607 | .687 | 16.95 | 17.44 | |
| C | ---- | .793 | ---- | 20.14 | |
| D | ---- | 1.00 | ---- | 25.40 | |
| E | .422 | .453 | 10.72 | 11.50 | |
| F | .115 | .200 | 2.93 | 5.08 | |
| G | ---- | .450 | ---- | 11.43 | |
| H | .220 | .249 | 5.59 | 6.32 | 2 |
| J | .250 | .375 | 6.35 | 9.52 | |
| K | .156 | ---- | 3.97 | ---- | |
| M | ---- | .667 | ---- | 16.94 | Dia |
| N | ---- | .080 | ---- | 2.03 | |
| P | .140 | .175 | 3.56 | 4.44 | Dia |

D0203AB (D05)

| Microsemi Catalog Number | | Peak Reverse Voltage |
|--------------------------|---------|----------------------|
| Standard | Reverse | |
| S3520 | R3520 | 200V |
| S3640 | R3640 | 400V |
| S3560 | R3560 | 600V |
| S3580 | R3580 | 800V |
| S35100 | R35100 | 1000V |
| S35120 | R35120 | 1200V |
| S35140 | R35140 | 1400V |
| R35160 | R35160 | 1600V |

- Low Forward Voltage
- Glass to Metal Construction
- Glass Passivated Die
- Excellent Reliability
- VRRM to 1600V
- 1050 Amps Surge Rating

Electrical Characteristics

| | | |
|-------------------------------------|--|---|
| Average forward current | IF(AV) 70 Amps | TC = 152°C, Half Sine Wave, RθJC = 0.65°C/W |
| Maximum surge current | IFSM 1050 Amps | 8.3ms, half sine, TJ = 200°C |
| Max I ² t for fusing | I ² t 4500 A ² s | |
| Max peak forward voltage | VFM 1.25 Volts | IFM = 200A; TJ = 25°C* |
| Max peak reverse current | IRM 50 μA | VRRM, TJ = 25°C |
| Max peak reverse current | IRM 3.0 mA | VRRM, TJ = 150°C |
| Max Recommended Operating Frequency | 10kHz | |

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

Thermal and Mechanical Characteristics

| | | |
|-------------------------------|------|------------------------------|
| Storage temperature range | TSTG | -65°C to 200°C |
| Operating junction temp range | TJ | -65°C to 200°C |
| Maximum thermal resistance | RθJC | 0.65°C/W Junction to Case |
| Typical thermal resistance | RθJC | 0.55°C/W Junction to Case |
| Mounting torque | | 30 inch pounds maximum |
| Weight | | .5 ounces (14 grams) typical |

Microsemi Corp.
Colorado

S/R35

Figure 1
Typical Forward Characteristics

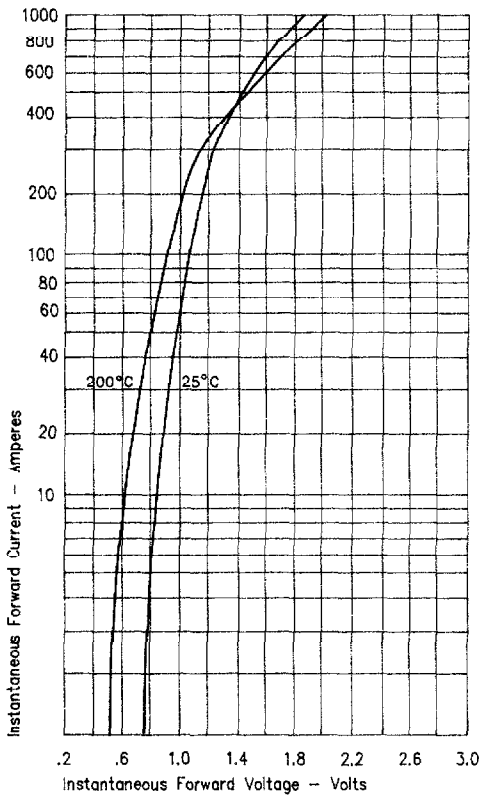


Figure 3
Forward Current Derating

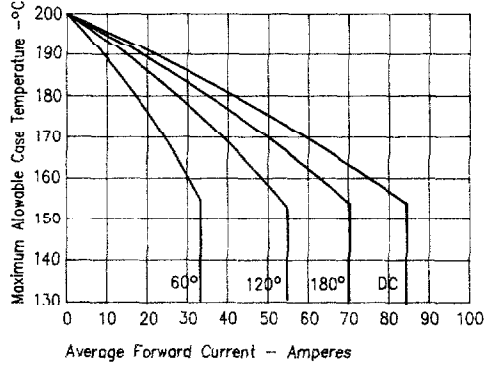


Figure 4
Maximum Forward Power Dissipation

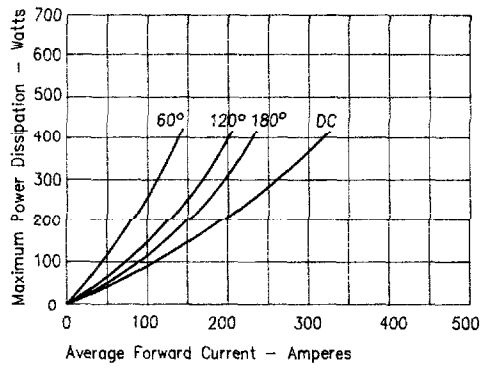


Figure 2
Typical Reverse Characteristics

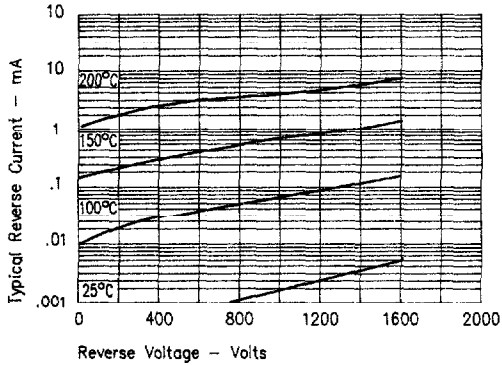
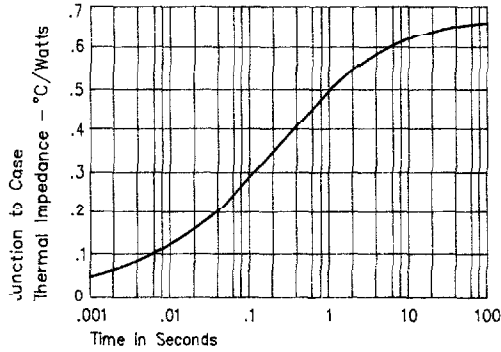
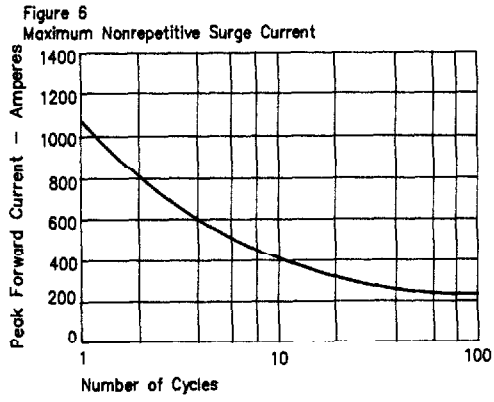


Figure 5
Transient Thermal Impedance



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