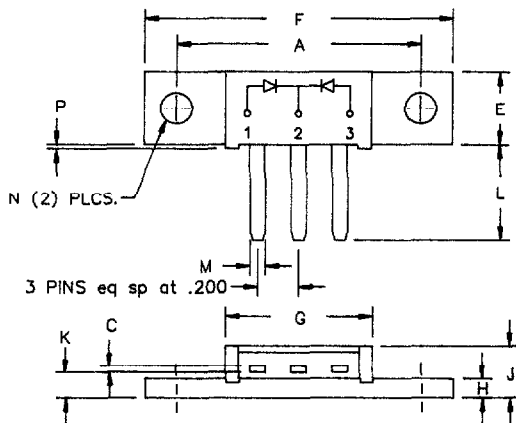


Schottky Or'ing Diode FST 62



| Dim. | Inches | | Millimeter | | Notes |
|------|---------|---------|------------|---------|-------|
| | Minimum | Maximum | Minimum | Maximum | |
| A | 1.180 | 1.195 | 29.97 | 30.35 | |
| C | .027 | .037 | 0.69 | 0.94 | |
| E | .350 | .370 | 8.89 | 9.40 | |
| F | 1.490 | 1.510 | 37.85 | 38.35 | |
| G | .695 | .715 | 17.65 | 18.16 | |
| H | .088 | .098 | 2.24 | 2.49 | |
| J | .240 | .260 | 6.10 | 6.60 | |
| K | .115 | .135 | 2.92 | 3.43 | |
| L | .460 | .480 | 11.68 | 12.19 | |
| M | .065 | .085 | 1.65 | 2.16 | |
| N | .151 | .161 | 3.84 | 4.09 | Dia |
| P | .015 | .025 | 0.38 | 0.64 | |

| Microsemi Catalog Number | Working Peak Reverse Voltage | Repetitive Peak Reverse Voltage |
|--------------------------|------------------------------|---------------------------------|
| FST6210 | 10V | 10V |
| FST6215 | 15V | 15V |
| FST6220 | 20V | 20V |

- Schottky Barrier Rectifier
- Guard Ring Protection
- Common Cathode Center Tap
- Low Forward Voltage
- 2X30 Amperes avg.
- 150°C Junction Temperature
- Reverse Energy Tested

Electrical Characteristics

| | | |
|---|--------------------|--|
| Average forward current per pkg | $I_F(AV)$ 60 Amps | $T_C = 105^\circ C$, Square wave, $R_{\theta JC} = 0.6^\circ C/W$ |
| Average forward current per leg | $I_F(AV)$ 30 Amps | $T_C = 105^\circ C$, Square wave, $R_{\theta JC} = 1.2^\circ C/W$ |
| Maximum surge current per leg | I_{FSM} 600 Amps | 8.3 ms, half sine, $T_J = 150^\circ C$ |
| Max repetitive peak reverse current per leg | $I_R(OV)$ 2 Amps | $f = 1$ KHz, $25^\circ C$, 1 μ sec Square wave |
| Max peak forward voltage per leg | V_{FM} .31 Volts | $I_{FM} = 30A$; $T_J = 125^\circ C^*$ |
| Max peak forward voltage per leg | V_{FM} .43 Volts | $I_{FM} = 30A$; $T_J = 25^\circ C^*$ |
| Max peak reverse current per leg | I_{RM} 500 mA | V_{RRM} , $T_J = 125^\circ C^*$ |
| Typical reverse current per leg | I_{RM} 3 mA | V_{RRM} , $T_J = 25^\circ C$ |
| Typical junction capacitance | C_J 6000 pF | $V_R = 5.0V$, $T_J = 25^\circ C$ |

*Pulse test: Pulse width 300 μ sec, Duty cycle 2%

Thermal and Mechanical Characteristics

| | | |
|--|-----------------|--------------------------------|
| Storage temp range | T_{STG} | $-40^\circ C$ to $125^\circ C$ |
| Operating junction temp range | T_J | $-40^\circ C$ to $125^\circ C$ |
| Max thermal resistance per leg per package | $R_{\theta JC}$ | 1.2°C/W Junction to case |
| Typical thermal resistance | $R_{\theta CS}$ | 0.6°C/W Junction to case |
| Mounting Base Torque | | 0.3°C/W Case to sink |
| Weight | | 10 inch pounds (maximum) |
| | | 0.3 ounce (8.4 grams) typical |

Microsemi Corp.
Colorado

FST 62



Figure 1
Typical Forward Characteristics - Per Leg

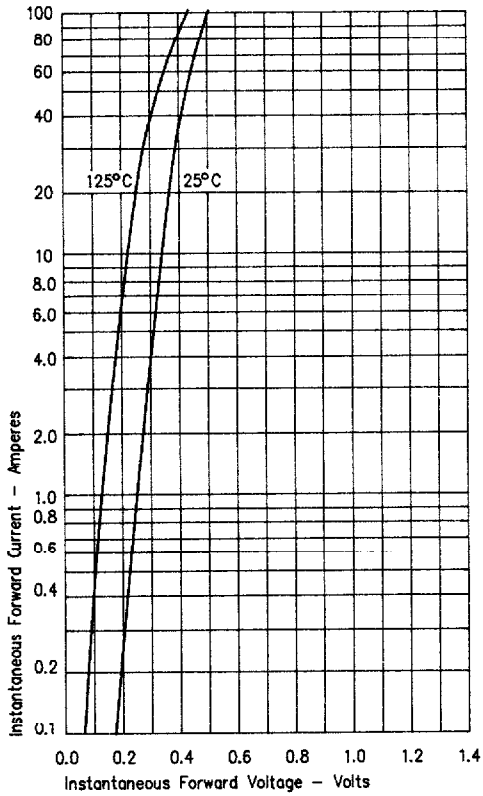


Figure 3
Typical Junction Capacitance - Per Leg

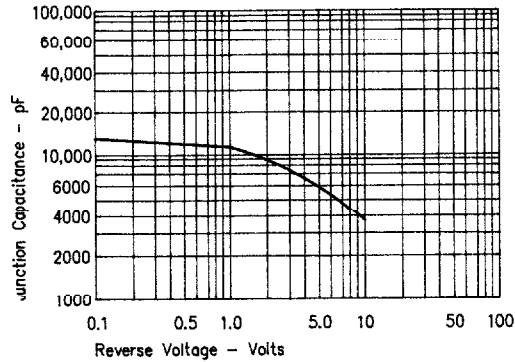


Figure 4
Forward Current Derating - Per Leg

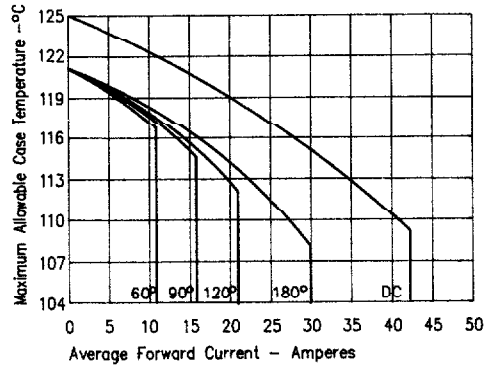


Figure 2
Typical Reverse Characteristics - Per Leg

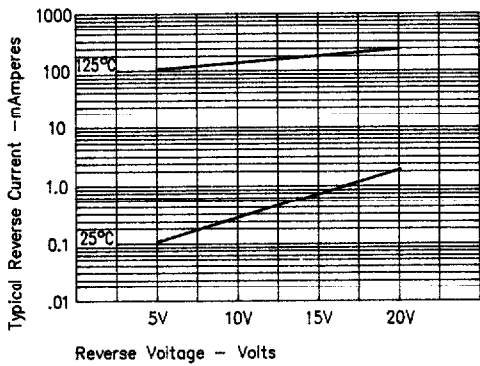


Figure 5
Maximum Forward Power Dissipation - Per Leg

