

## Diode – Diode Module

## Features

- Improved glass passivation for high reliability
- Exceptional stability at high temperatures
- High di/dt and dv/dt capabilities
- Low thermal resistance

**Maximum Ratings** ( $T_A = 25^{\circ}\text{C}$  unless otherwise noted)

| Parameter  | Symbol       | Values | Units                 |
|--|--------------|--------|-----------------------|
| Maximum average forward current @ $T_J = 85^{\circ}\text{C}$ | $I_{F(AV)}$  | 40     | A                     |
| Maximum average RMS forward current                          | $I_{F(RMS)}$ | 63     | A                     |
| Maximum non-repetitive surge current @ $t = 10\text{ms}$     | $I_{FSM}$    | 900    | A                     |
| Maximum $I^2t$ for fusing @ $t = 10\text{ms}$                | $I^2t$       | 7.2    | $\text{kA}^2\text{s}$ |



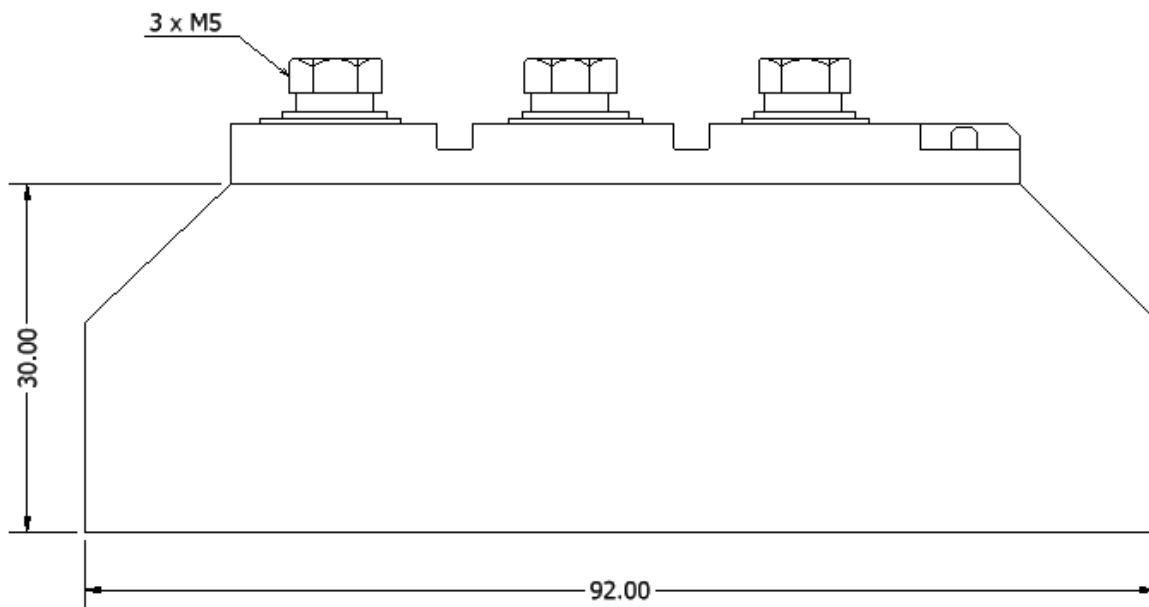
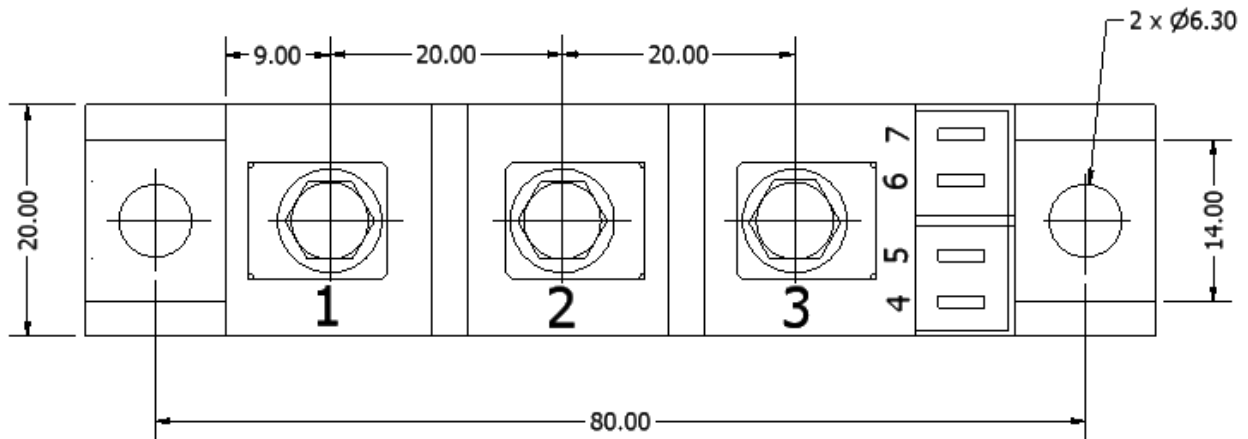
M1 PACKAGE

**Thermal & Mechanical Specifications** ( $T_A = 25^{\circ}\text{C}$  unless otherwise noted)

| Parameter                            | Symbol       | Values      | Units                |
|--------------------------------------|--------------|-------------|----------------------|
| Operating junction temperature range | $T_J$        | -65 to +125 | $^{\circ}\text{C}$   |
| Thermal resistance, junction to case | $R_{th(JC)}$ | 1.0         | $^{\circ}\text{C/W}$ |

**Electrical Characteristics** ( $T_A = 25^{\circ}\text{C}$  unless otherwise noted)

| Parameter  | Symbol       | Values      | Units |
|--|--------------|-------------|-------|
| Maximum average on-state current, $180^{\circ}\text{C}$ sinusoidal | $I_{T(max)}$ | 40          | A     |
| Maximum repetitive peak reverse voltage range                      | $V_{RRM}$    | 200 to 1600 | V     |
| Forward voltage drop   | $V_{FM}$     | 1.25        | V     |
| RMS isolation voltage  | $V_{ISO}$    | 2500        | V     |



ALL DIMENSIONS ARE IN MM

**Diode Configuration**

