

## Diode-Diode Module, 60 Amps

**Features**

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

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

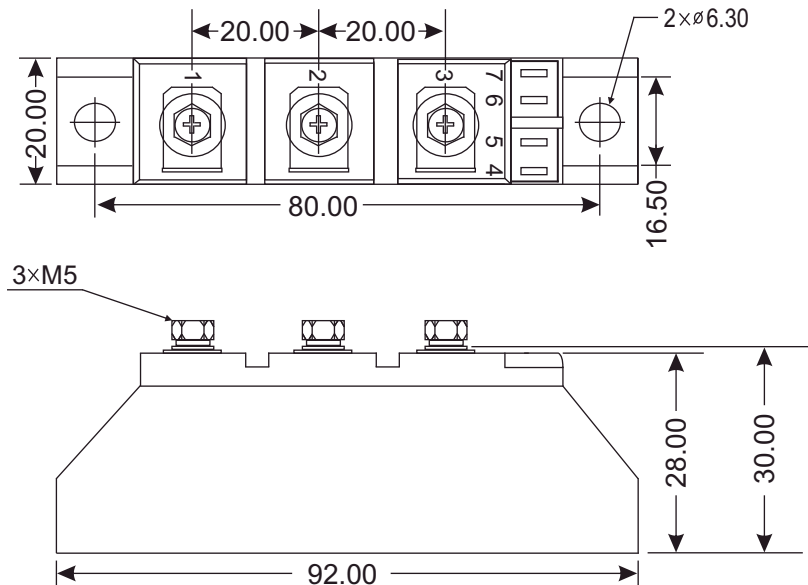
| Type number | Voltage Code | $V_{RRM}$ , Maximum repetitive peak reverse voltage<br>(V) | $V_{RSM}$ , Maximum non-repetitive peak reverse voltage<br>(V) | $V_{DRM}$ , Maximum repetitive peak off-state voltage<br>(V) | $I_{RRM}$ , Maximum reverse leakage current @ $T_{JMAX}$<br>(mA) |
|-------------|--------------|--|--|--|--|
| NDD57       | 60           | 600  | 700  | 600  | max. 4   |
|             | 80           | 800  | 900  | 800  |  |
|             | 100          | 1000   | 1100   | 1000   |  |
|             | 120          | 1200   | 1300   | 1200   |  |
|             | 140          | 1400   | 1500   | 1400   |  |
|             | 160          | 1600   | 1700   | 1600   |  |
|             | 180          | 1800   | 1900   | 1800   |  |

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

| Parameter  | Symbol       | Values   | Units                |
|--|--------------|----------|----------------------|
| Maximum average forward current @ $T_J = 85^\circ\text{C}$ | $I_{F(AV)}$  | 60       | A                    |
| Maximum average RMS forward current                        | $I_{F(RMS)}$ | 94       | A                    |
| Maximum non-repetitive surge current                       | $I_{FSM}$    | 1100     | A                    |
| Maximum $I^2t$ for fusing                                  | $I^2t$       | 6100     | $\text{A}^2\text{s}$ |
| Forward voltage drop                                       | $V_{FM}$     | max. 1.6 | V                    |
| Isolation voltage  | $V_{ISO}$    | 3000     | V                    |

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

| Parameter                            | Symbol       | Values      | Units              |
|--------------------------------------|--------------|-------------|--------------------|
| Operating junction temperature range | $T_J$        | -40 to +125 | $^\circ\text{C}$   |
| Storage temperature                  | $T_{stg}$    | -40 to +125 | $^\circ\text{C}$   |
| Thermal resistance, junction to case | $R_{th(JC)}$ | 0.5         | $^\circ\text{C/W}$ |
| Mounting torque                      | to heatsink  | F           | Nm                 |
|                                      | to terminals |             |                    |
| Weight                               | W            | 100         | g                  |

**Package Outline**
*(All dimensions in mm)*

**Circuit Configuration**

| Circuit Description                 | Configuration Code | Circuit Drawing |
|-------------------------------------|--------------------|-----------------|
| Series Connection (doubler circuit) | N                  |                 |
| Common Anode                        | A                  |                 |
| Common Cathode                      | K                  |                 |



## Ordering Table

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| <i>NDD</i> | <i>57</i> | <i>N</i> | <i>160</i> |
|------------|-----------|----------|------------|
| 1          | 2         | 3        | 4          |

1 – Power Module

> DD = Diode-Diode

> TD = Thyristor-Diode

> TT = Thyristor-Thyristor

2 – Current Rating =  $I_{F(AV)}$

3 – Circuit Configuration (see Table)

4 – Voltage Code (see Voltage Ratings table)