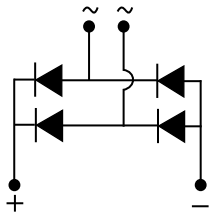
# Single Phase Bridge Rectifier, 60 Amps

**Features**

- Easy connections
- Excellent power volume ratio
- Insulated type




MDQ

| **Voltage Ratings** ($T_J$ = 25°C unless otherwise noted) | | | | |
|---|---|---|---|---|
| **Type number** | **Voltage code** | **$V_{RRM}$, Max. repetitive peak reverse voltage (V)** | **$V_{RSM}$, Max. non-repetitive peak reverse voltage (V)** | **$I_{RRM}$ max @ $T_J$ max (mA)** |
| MDQ60 | 80 | 800 | 900 | 1.5 |
| | 100 | 1000 | 1100 | |
| | 120 | 1200 | 1300 | |
| | 140 | 1400 | 1500 | |
| | 160 | 1600 | 1700 | |


| **Electrical Specifications** ($T_J$ = 25°C unless otherwise noted) | | | | |
|---|---|---|---|---|
| **Parameters** | **Conditions** | **Symbol** | **Values** | **Units** |
| Maximum DC output current | $T_C$ = 115°C, $T_J$ = 150°C | $I_{DC}$ | 60 | A |
| Forward surge current (non-repetitive), one cycle | f = 50 Hz | $I_{FSM}$ | 550 | A |
| Fusing current | t = 10 ms | $I^2t$ | 1520 | $A^2s$ |
| Maximum forward voltage drop | $I_{FM}$ = 40A, $T_J$ = 25 °C | $V_{FM}$ | 1.19 | V |
| RMS isolation voltage | 1 min. | $V_{ISO}$ | 3000 | V |

| **Thermal and Mechanical Specifications** ($T_J$ = 25°C unless otherwise noted) | | | | |
|---|---|---|---|---|
| **Parameters** | | **Symbol** | **Values** | **Units** |
| Maximum operating junction temperature range | | $T_J$ | - 40 to + 150 | °C |
| Maximum storage temperature range | | $T_{STG}$ | - 40 to + 125 | °C |
| Threshold Voltage | | $V_{TO}$ | max. 0.78 | V |
| Slope Resistance | | $r_T$ | max. 8.1 | mΩ |
| Maximum thermal resistance, junction to case | | $R_{th(J-C)}$ | 1.1 | °C/W |
| Mounting torque | to heatsink | F | 4 ± 15% | Nm |
| | to terminal | | 4 ± 15% | |
| Approximate weight | | W | 160 | g |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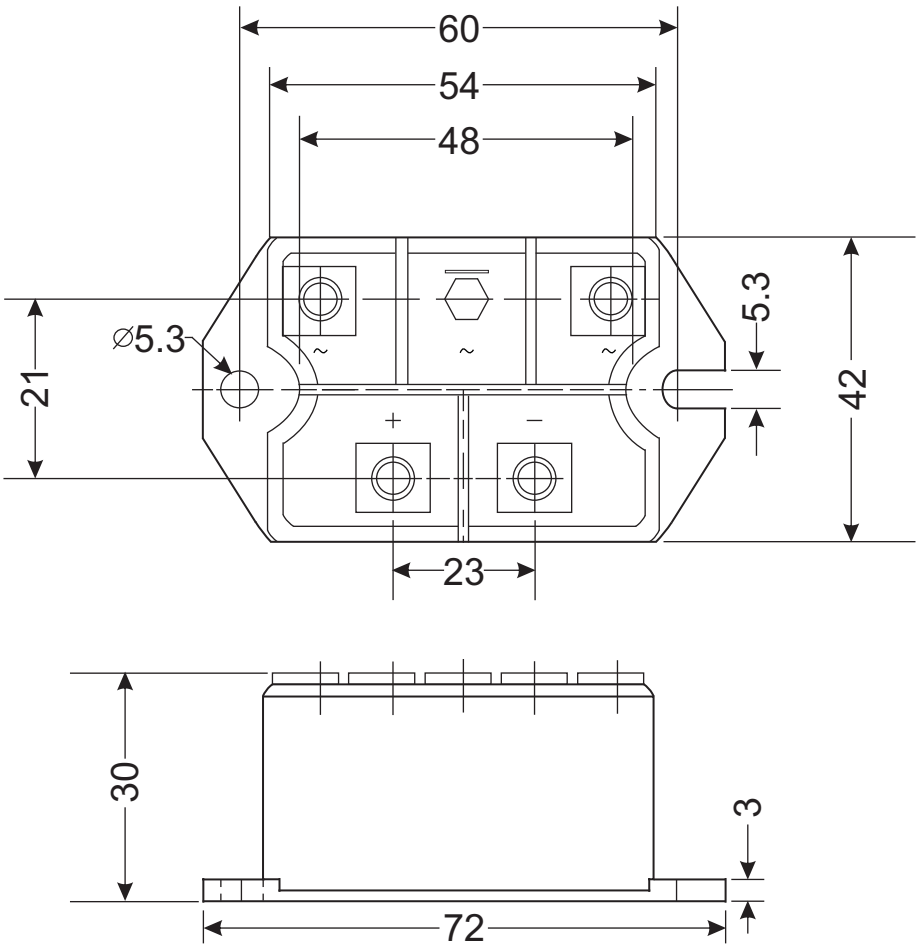
## Package Outline

*(All dimensions in mm)*




## Ordering Table

| MDQ | 60 | / | 160 |
|---|---|---|---|
| **1** | 2 | | 3 |

1 – Single-Phase Bridge
2 – Current = $I_D$
3 – Voltage Code x 10 = $V_{RRM}$ (See Voltage Ratings Table)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