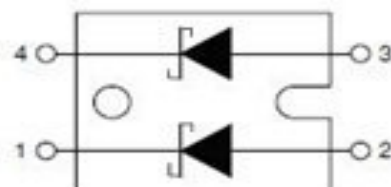


## MDX200.02

### INSULATED FAST SCHOTTKY DIODE MODULE

**Output Current**      **200A**

**Blocking Voltage**      **200V**



#### Features

- Low noise switching
- Ultrafast recovery time
- Low forward voltage
- High surge current capability
- Low leakage current
- Pb-free finished; **RoHS compliant**

#### Applications

- Ultrasonic cleaners and welders
- Inductive heating and melting
- Converter and chopper

| Characteristics |                                       | Conditions                                         | Value                        |
|-----------------|---------------------------------------|----------------------------------------------------|------------------------------|
| $V_{RRM}$       | Max repetitive peak reverse voltage   | $T_J = 25\text{ }^{\circ}\text{C}$                 | 200 V                        |
| $I_{F(AV)}$     | Average forward current               | $T_C = 150\text{ }^{\circ}\text{C}$                | 2X100 A                      |
| $I_r$           | Reverse current                       | $T_J = 25\text{ }^{\circ}\text{C}$                 | 3 mA                         |
|                 |                                       | $T_J = 125\text{ }^{\circ}\text{C}$                | 9 mA                         |
| $V_F$           | Forward drop voltage                  | $T_J = 25\text{ }^{\circ}\text{C}$                 | 0,92 V                       |
|                 |                                       | $T_J = 150\text{ }^{\circ}\text{C}$                | 0,84 V                       |
| $I_{FSM}$       | Surge forward current                 | Half sine wave, 10 ms                              | 1000 A                       |
|                 |                                       | $T_C = 100\text{ }^{\circ}\text{C}$                | 120 ns                       |
| $I_{rm}$        | Max reverse recovery current          | $T_C = 25\text{ }^{\circ}\text{C}$                 | 10,8 A                       |
|                 |                                       | $T_C = 100\text{ }^{\circ}\text{C}$                | 29 A                         |
| $R_{th(j-c)}$   | Thermal resistance (junction to case) | Mounting surface flat, smooth and greased          | 0,600 $^{\circ}\text{C/W}$   |
| $R_{th(c-h)}$   | Thermal resistance (case to heatsink) | Mounting surface flat, smooth and greased          | 0,100 $^{\circ}\text{C/W}$   |
| $T_{jmax}$      | Operating junction temperature        |                                                    | -40 / 150 $^{\circ}\text{C}$ |
| $T_{op}$        | Operating temperature                 |                                                    | -40 / 150 $^{\circ}\text{C}$ |
| $T_{stg}$       | Max storage temperature               |                                                    | -40 / 150 $^{\circ}\text{C}$ |
| $V_{INS}$       | RMS Insulating voltage                | 50 / 60 Hz $t = 60\text{ s}$ ( $i < 1\text{ mA}$ ) | 2500 V                       |
|                 |                                       | 50 / 60 Hz $t = 1\text{ s}$ ( $i < 1\text{ mA}$ )  | 3000 V                       |
| $M_D$           | Mounting torque                       | Max                                                | 1,5 Nm                       |
| $M_T$           | Terminal torque                       | Max                                                | 1,5 Nm                       |

