

MITSUBISHI DIODE MODULES

# RM15TA-24,-2H

HIGH VOLTAGE MEDIUM POWER GENERAL USE  
INSULATED TYPE

RM15TA-24,-2H



- **Io** DC output current ..... **30A**
- **V<sub>RRM</sub>** Repetitive peak reverse voltage ..... **1200/1600V**
- **3 phase bridge**
- **Insulated Type**
- **UL Recognized**

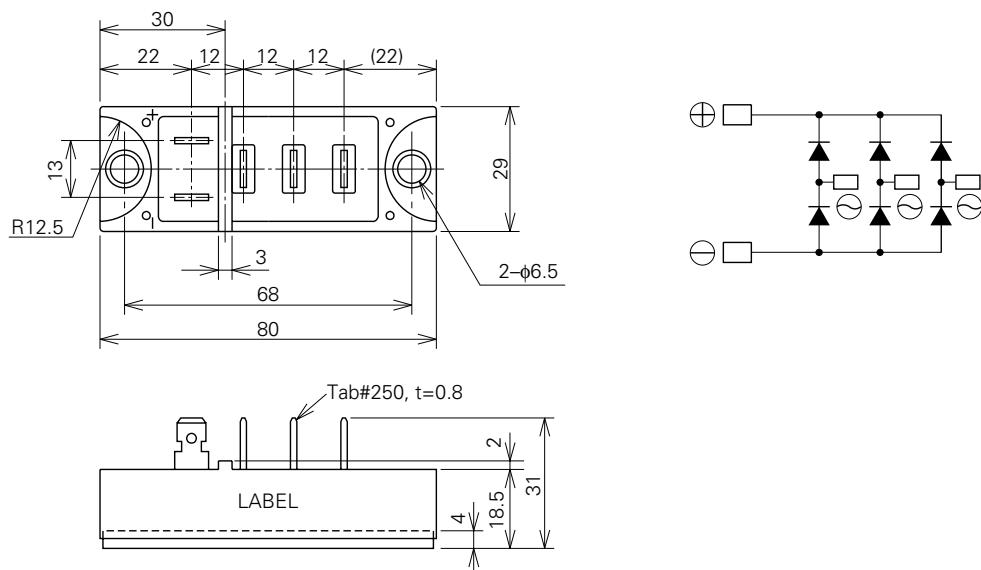
Yellow Card No. E80276 (N)  
File No. E80271

## APPLICATION

AC motor controllers, DC motor controllers, Battery DC power supplies,  
DC power supplies for control panels, and other general DC power equipment

## OUTLINE DRAWING & CIRCUIT DIAGRAM

Dimensions in mm



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**ABSOLUTE MAXIMUM RATINGS**

| Symbol           | Parameter                           | Voltage class |      | Unit |
|------------------|-------------------------------------|---------------|------|------|
|                  |                                     | 24            | 2H   |      |
| V <sub>RRM</sub> | Repetitive peak reverse voltage     | 1200          | 1600 | V    |
| V <sub>RSM</sub> | Non-repetitive peak reverse voltage | 1350          | 1700 | V    |
| E <sub>a</sub>   | Recommended AC input voltage        | 370           | 440  | V    |

| Symbol           | Parameter                              | Conditions                                                     | Ratings               | Unit             |
|------------------|----------------------------------------|----------------------------------------------------------------|-----------------------|------------------|
| I <sub>O</sub>   | DC output current                      | Three-phase full wave rectifying circuit, T <sub>c</sub> =97°C | 30                    | A                |
| I <sub>FSM</sub> | Surge (non-repetitive) forward current | One half cycle at 60Hz, peak value                             | 300                   | A                |
| I <sup>2</sup> t | I <sup>2</sup> t for fusing            | Value for one cycle of surge current                           | 3.8 × 10 <sup>2</sup> | A <sup>2</sup> s |
| f                | Maximum operating frequency            |                                                                | 1000                  | Hz               |
| T <sub>j</sub>   | Junction temperature                   |                                                                | -40~+150              | °C               |
| T <sub>stg</sub> | Storage temperature                    |                                                                | -40~+125              | °C               |
| V <sub>iso</sub> | Isolation voltage                      | Charged part to case                                           | 2500                  | V                |
| —                | Mounting torque                        | Mounting screw M6                                              | 1.96~2.94             | N·m              |
| —                | Weight                                 |                                                                | 20~30                 | kg·cm            |
| —                |                                        |                                                                | 120                   | g                |

**ELECTRICAL CHARACTERISTICS**

| Symbol                | Parameter                  | Test conditions                                                 | Limits |      |      | Unit |
|-----------------------|----------------------------|-----------------------------------------------------------------|--------|------|------|------|
|                       |                            |                                                                 | Min.   | Typ. | Max. |      |
| I <sub>RRM</sub>      | Repetitive reverse current | T <sub>j</sub> =150°C, V <sub>RRM</sub> applied                 | —      | —    | 2.0  | mA   |
| V <sub>F</sub>        | Forward voltage            | T <sub>j</sub> =25°C, I <sub>F</sub> =30A, instantaneous meas.  | —      | —    | 1.35 | V    |
| R <sub>th</sub> (j-o) | Thermal resistance         | Junction to case                                                | —      | —    | 0.65 | °C/W |
| R <sub>th</sub> (c-f) | Contact thermal resistance | Case to fin, conductive grease applied                          | —      | —    | 0.1  | °C/W |
| —                     | Insulation resistance      | Measured with a 500V megohmmeter between main terminal and case | 10     | —    | —    | MΩ   |