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• 0912-5958431

• 0912-5958432



• 021-66717001



مایسترونیک

فروشگاه قطعات الکترونیک

تخصص، کیفیت، قیمت مناسب

تهران - خیابان جمهوری - نرسیده به پل حافظ - پاساژ توکل - طبقه زیر همکف - پلاک B34


International  
**IOR** Rectifier

**MT SERIES**

**THREE PHASE BRIDGE**

**Power Modules**

### Features

- Universal, 3 way terminals:  
push-on, wrap around or solder
- High thermal conductivity package,  
electrically insulated case
- Center hole fixing
- Excellent power/volume ratio
- UL E 62320 approved 
- Terminals Solderable as per MIL-STD-202 METHOD 208,  
solder: Sn/Pb (60/40); solder temperature: 235-260°C mx. time: 8-10 sec.

25 A  
35 A

### Description

A range of extremely compact, encapsulated three phase bridge rectifiers offering efficient and reliable operation. They are intended for use in general purpose and instrumentation applications.

### Major Ratings and Characteristics

| Parameters      | 26MT        | 36MT | Units            |
|-----------------|-------------|------|------------------|
| $I_o$           | 25          | 35   | A                |
| @ $T_C$         | 70          | 60   | °C               |
| $I_{FSM}$       | 360         | 475  | A                |
| @ 50Hz          | 360         | 475  | A                |
| @ 60Hz          | 375         | 500  | A                |
| $I^2t$          | 635         | 1130 | A <sup>2</sup> s |
| @ 50Hz          | 635         | 1130 | A <sup>2</sup> s |
| @ 60Hz          | 580         | 1030 | A <sup>2</sup> s |
| $V_{RRM}$ range | 100 to 1600 |      | V                |
| $T_J$           | -55 to 150  |      | °C               |

## 26MT./36MT.. Series

Bulletin I2771 rev. E 04/03

International  
IRF Rectifier

### ELECTRICAL SPECIFICATIONS

#### Voltage Ratings

| Type number   | Voltage Code | $V_{RRM}$ , maximum repetitive peak reverse voltage<br>V | $V_{RSM}$ , maximum non-repetitive peak rev. voltage<br>V | $I_{RRM}$ max.<br>@ $T_J$ max.<br>mA |
|---------------|--------------|--|---|--------------------------------------|
| 26MT../36MT.. | 10           | 100  | 150   | 2                                    |
|               | 20           | 200  | 275   |                                      |
|               | 40           | 400  | 500   |                                      |
|               | 60           | 600  | 725   |                                      |
|               | 80           | 800  | 900   |                                      |
|               | 100          | 1000   | 1100  |                                      |
|               | 120          | 1200   | 1300  |                                      |
|               | 140          | 1400   | 1500  |                                      |
|               | 160          | 1600   | 1700  |                                      |

#### Forward Conduction

| Parameters   | 26MT | 36MT  | Units             | Conditions   |
|--|------|-------|-------------------|--|
| $I_O$ Maximum DC output current<br>@ $T_C$   | 25   | 35    | A                 | 120° Rect Conduction angle   |
|  | 70   | 60    | °C                |  |
| $I_{FSM}$ Maximum peak, one-cycle non-repetitive forward current<br>Initial $T_J = T_J$ max. | 360  | 475   | A                 | t = 10ms No voltage  |
|  | 375  | 500   |                   | t = 8.3ms reapplied  |
|  | 300  | 400   |                   | t = 10ms 100% $V_{RRM}$  |
|  | 314  | 420   |                   | t = 8.3ms reapplied  |
| $I^2t$ Maximum $I^2t$ for fusing<br>Initial $T_J = T_J$ max.                                 | 635  | 1130  | A <sup>2</sup> s  | t = 10ms No voltage  |
|  | 580  | 1030  |                   | t = 8.3ms reapplied  |
|  | 450  | 800   |                   | t = 10ms 100% $V_{RRM}$  |
|  | 410  | 730   |                   | t = 8.3ms reapplied  |
| $I^2\sqrt{t}$ Maximum $I^2\sqrt{t}$ for fusing   | 6360 | 11300 | A <sup>2</sup> √s | $I^2t$ for time $t_x = I^2\sqrt{t_x}\sqrt{t_x}$ ; $0.1 \leq t_x \leq 10$ ms, $V_{RRM} = 0$ V |
| $V_{F(TO)1}$ Low-level of threshold voltage  | 0.88 | 0.86  | V                 | $(16.7\% \times \pi \times I_{F(AV)}) < I < \pi \times I_{F(AV)}$ , @ $T_J$ max.             |
| $V_{F(TO)2}$ High-level of threshold voltage   | 1.13 | 1.03  | V                 | $I > \pi \times I_{F(AV)}$ , @ $T_J$ max.  |
| $r_{t1}$ Low-level forward slope resistance  | 7.9  | 6.3   | mΩ                | $(16.7\% \times \pi \times I_{F(AV)}) < I < \pi \times I_{F(AV)}$ , @ $T_J$ max.             |
| $r_{t2}$ High-level forward slope resistance   | 5.2  | 5.0   | mΩ                | $I > \pi \times I_{F(AV)}$ , @ $T_J$ max.  |
| $V_{FM}$ Maximum forward voltage drop  | 1.26 | 1.19  | V                 | $T_J = 25^\circ\text{C}$ , $I_{FM} = 40A_{pk}$ - Per single Junction                         |
| $I_{RRM}$ Max. DC reverse current  | 100  |       | μA                | $T_J = 25^\circ\text{C}$ , per Junction at rated $V_{RRM}$                                   |
| $V_{INS}$ RMS isolation voltage  | 2700 |       | V                 | $T_J = 25^\circ\text{C}$ , All terminal shorted f=50Hz, t=1s                                 |

Thermal and Mechanical Specifications

| Parameters  | 26MT       | 36MT | Units | Conditions   |
|---|------------|------|-------|--|
| T <sub>J</sub> Max. junction temperature range              | -55 to 150 |      | °C    |  |
| T <sub>stg</sub> Max. storage temperature range             | -55 to 150 |      | °C    |  |
| R <sub>thJC</sub> Max. thermal resistance junction to case  | 1.42       | 1.35 | K/W   | DC operation per bridge<br>(Based on total power loss of bridge) |
| R <sub>thCS</sub> Max. thermal resistance, case to heatsink | 0.2        | 0.2  | K/W   | Mounting surface, smooth, flat and greased                       |
| wt Approximate weight                                       | 20         |      | g     |  |
| T Mounting Torque ± 10%                                     | 2.0        |      | Nm    | Bridge to heatsink with screw M4                                 |

Ordering Information Table

**Device Code**

36

MT

160

①

②

③

**1** - Current rating code: 26 = 25A (Avg)  
36 = 35A (Avg)

**2** - Basic part number

**3** - Voltage code ( code x 10 = V<sub>RRM</sub>)

Outline Table

6.3 x .8 (.25 x .03)

10  
(.39)

23 (.90)

21 (.83)

25.3 (.99) MAX

16 (.63)

5.2 (.20)

28.5 (1.12)

+

Not To Scale

Suggested plugging force:  
400 N max; axially applied to faston terminals

All dimensions in millimeters (inches)

## 26MT../36MT.. Series

Bulletin I2771 rev. E 04/03

International  
IR Rectifier

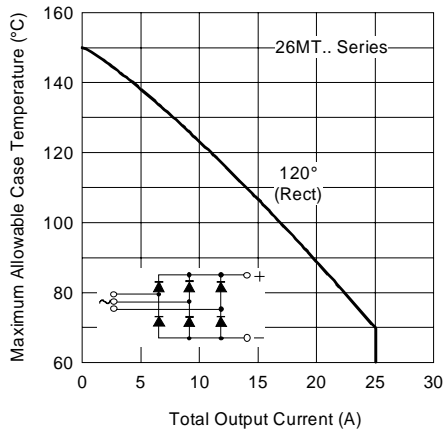


Fig. 1 - Current Ratings Characteristics

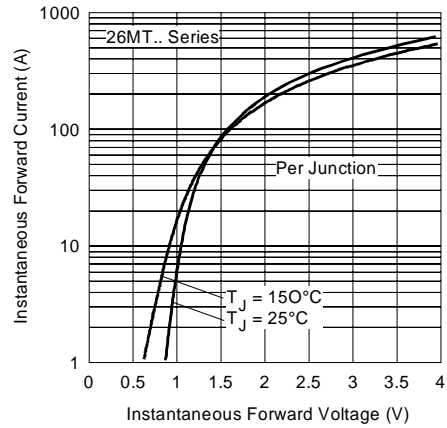


Fig. 2 - Forward Voltage Drop Characteristics

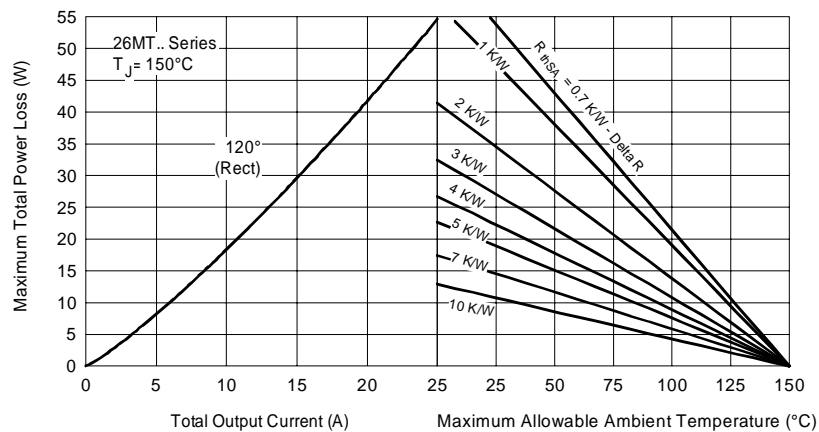


Fig. 3 - Total Power Loss Characteristics

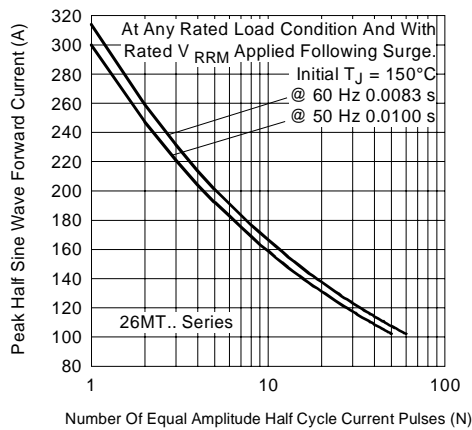


Fig. 4 - Maximum Non-Repetitive Surge Current

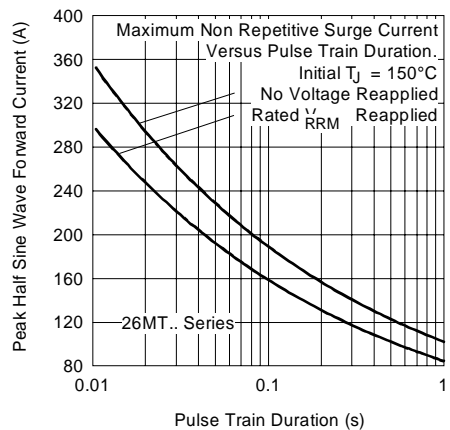


Fig. 5 - Maximum Non-Repetitive Surge Current

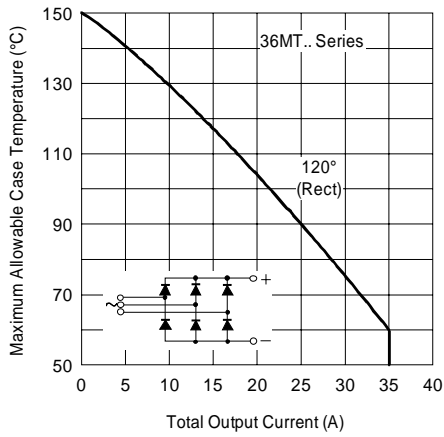


Fig. 6 - Current Ratings Characteristics

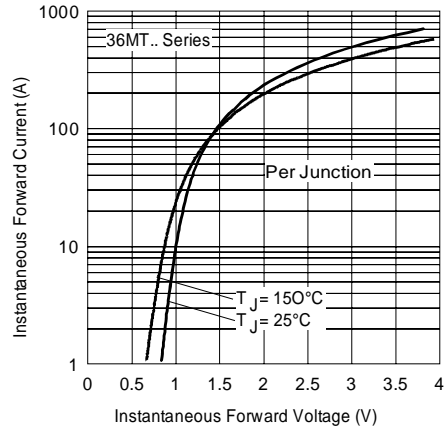


Fig. 7 - Forward Voltage Drop Characteristics

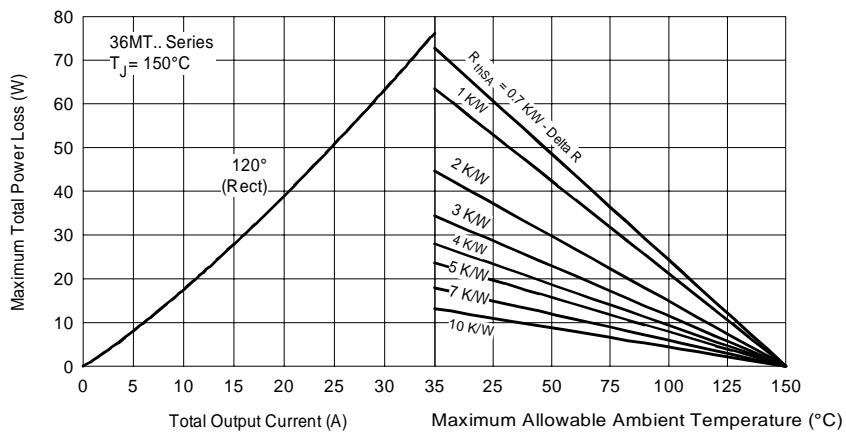


Fig. 8 - Total Power Loss Characteristics

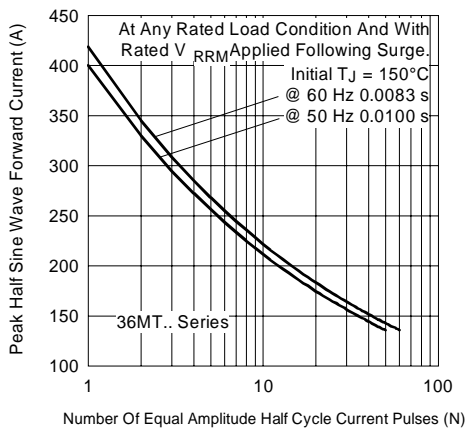


Fig. 9 - Maximum Non-Repetitive Surge Current

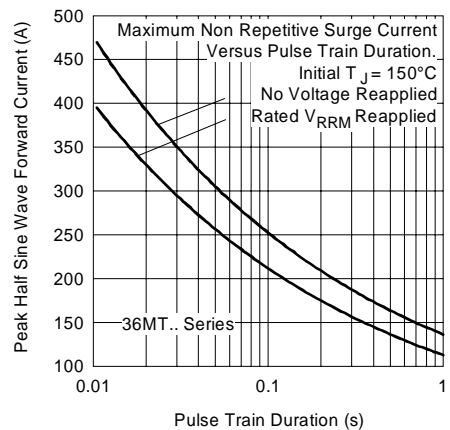


Fig. 10 - Maximum Non-Repetitive Surge Current

**26MT../36MT.. Series**

Bulletin I2771 rev. E 04/03

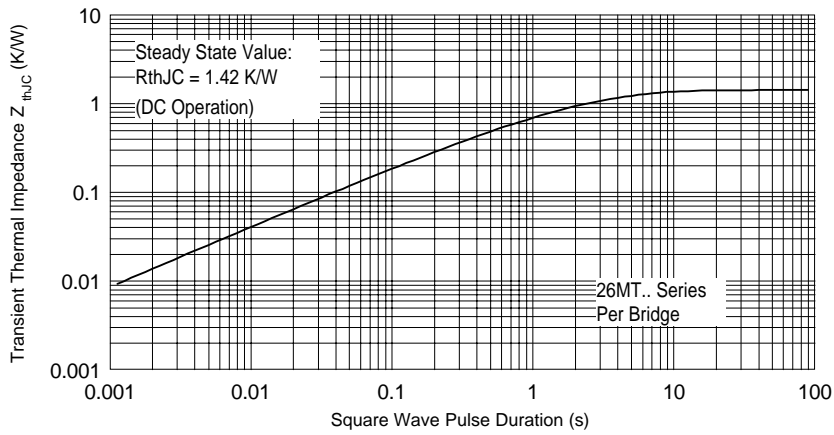


Fig. 11 - Thermal Impedance  $Z_{thJC}$  Characteristics

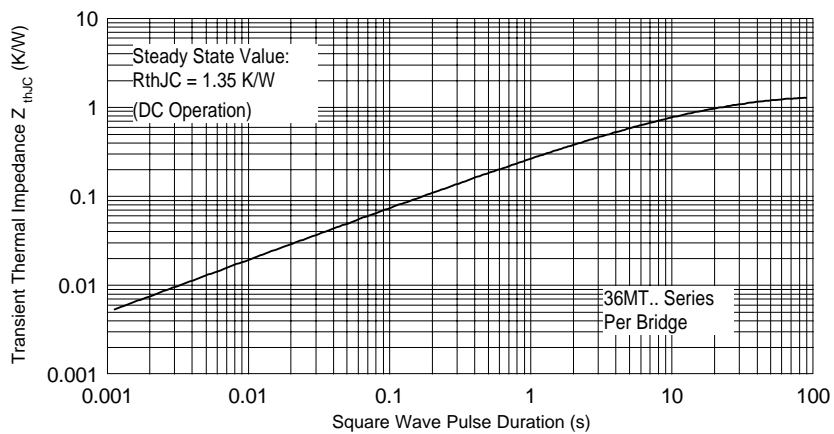


Fig. 12 - Thermal Impedance  $Z_{thJC}$  Characteristics

Data and specifications subject to change without notice.  
This product has been designed and qualified for Industrial and Consumer Level.  
Qualification Standards can be found on IR's Web site.