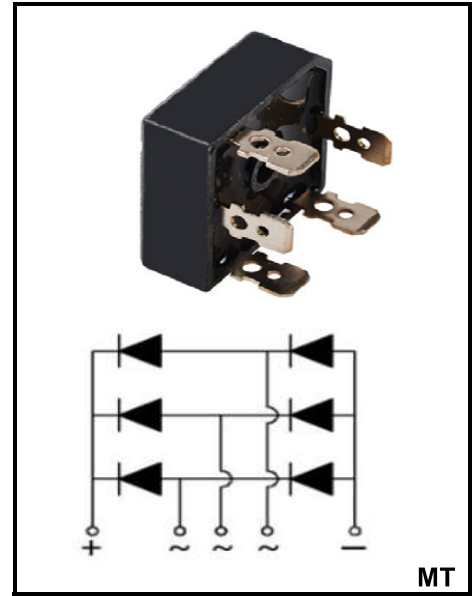


35A Three Phase Glass Passivated Bridge Rectifier
Voltage - 800 to 1600 V
Forward Current – 35A
FEATURES

- ◆Glass passivated chip
- ◆Low reverse leakage current
- ◆High surge current capability
- ◆Compliant to RoHS directive 2011/65/EU

MECHANICAL DATA

- ◆Case: MT
- ◆Terminals: Solderable per MIL-STD-202, Method 208
- ◆Approx. Weight: About 18 grams


Maximum Ratings And Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

| Parameter | | Symbols | MT3508 | MT3510 | MT3512 | MT3514 | MT3516 | Units |
|--|---|-----------------|----------|--------|--------|--------|--------|------------------|
| Maximum Repetitive Peak Reverse Voltage | | V_{RRM} | 800 | 1000 | 1200 | 1400 | 1600 | V |
| Average rectified output current | with heatsink, $T_c=85^{\circ}C$ | $I_{(AV)}$ | 35 | | | | | A |
| Peak surge forward current, 8.3ms single half sine-wave superimposed on rated load | | I_{FSM} | 400 | | | | | A |
| Rating for fusing, $1ms < t < 8.3ms$, $T_j=25^{\circ}C$, Rating of per diode | | I^2t | 664 | | | | | A ² S |
| Junction temperature and Storage temperature | | T_j, T_{stg} | -55~+150 | | | | | °C |
| Dielectric strength, terminals to case AC 1 minute | | V_{DS} | 2.0 | | | | | KV |
| Peak Forward Voltage @ $I_F=17.5A$ | | V_F | 1.1 | | | | 1.2 | V |
| Peak Reverse Current $V_R=V_{RRM}$.Pulse measurement Rating of per diode | $T_j=25^{\circ}C$ $T_j=125^{\circ}C$ | I_R | 5 500 | | | | | uA |
| Junction to ambient thermal resistance, without heatsink | | $R_{\theta JA}$ | 26 | | | | | °C/W |
| Junction to case thermal resistance, with heatsink | | $R_{\theta JC}$ | 0.95 | | | | | °C/W |

Characteristics (Typical)

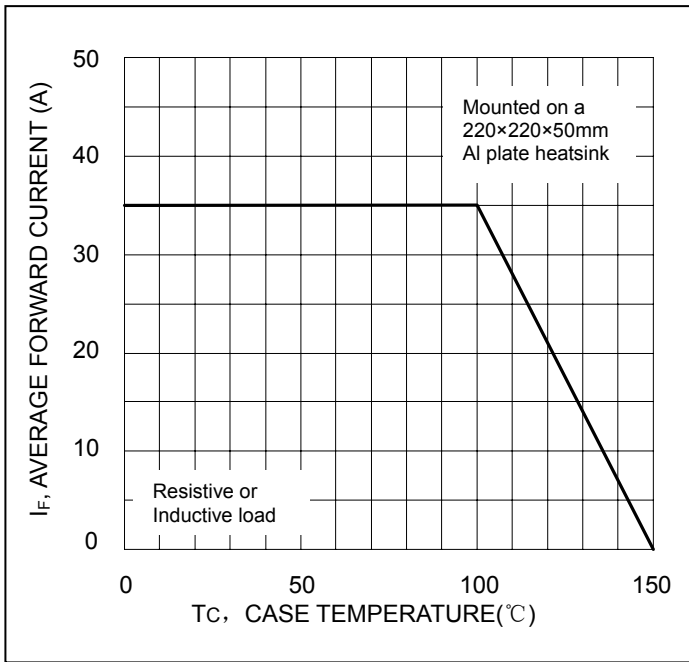


Fig. 1 Forward Current Derating Curve

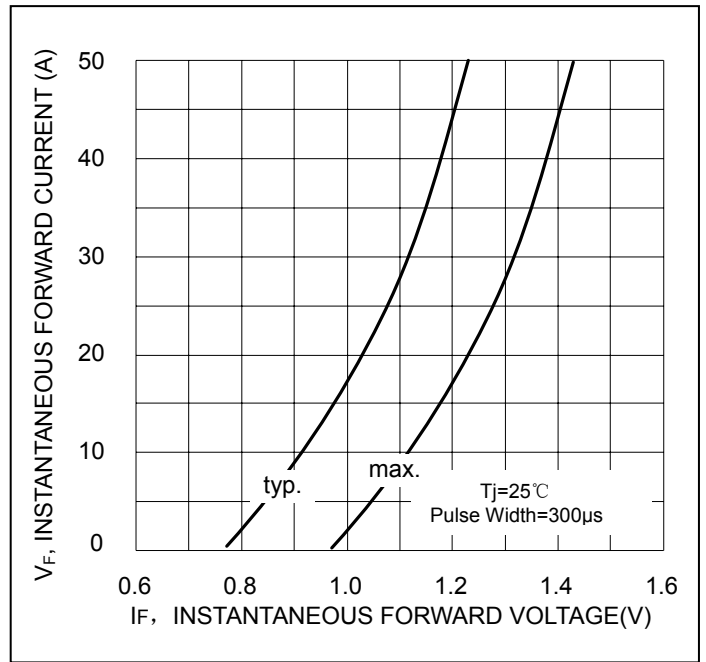


Fig.2 Typical Forward Characteristics

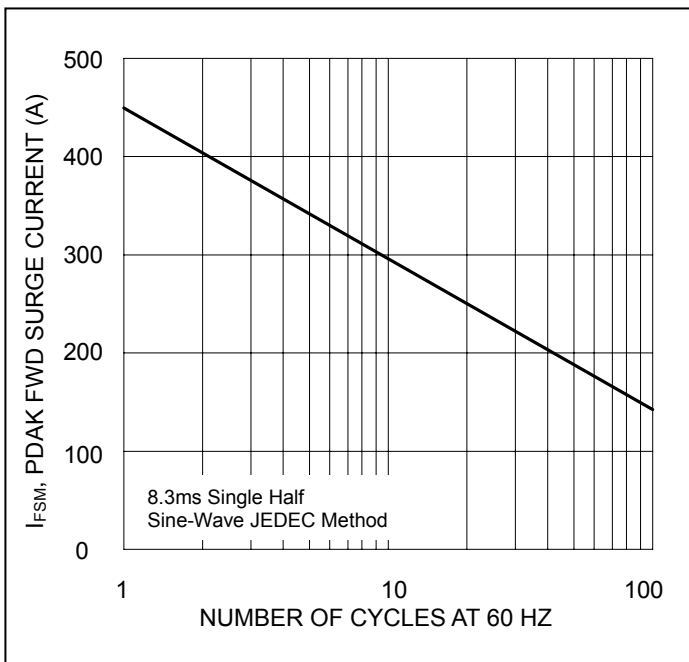


Fig.3 Max Non-Repetitive Peak Surge Current

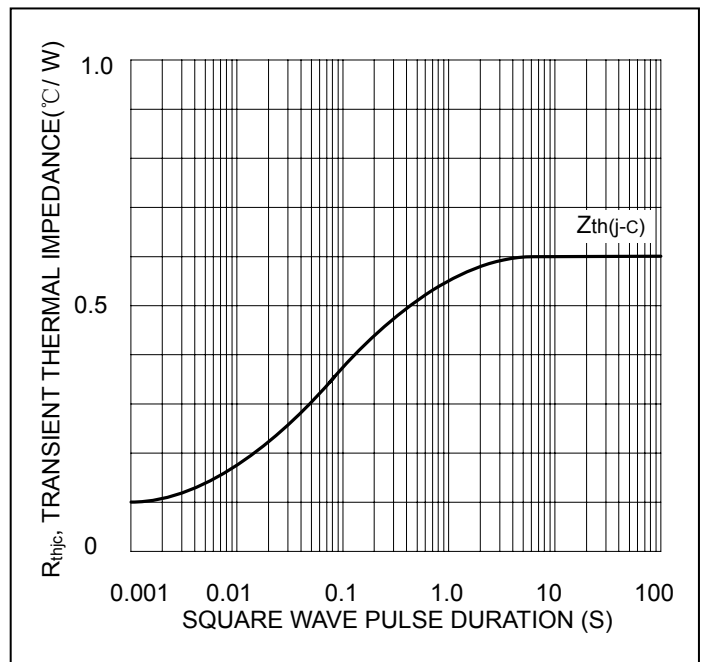
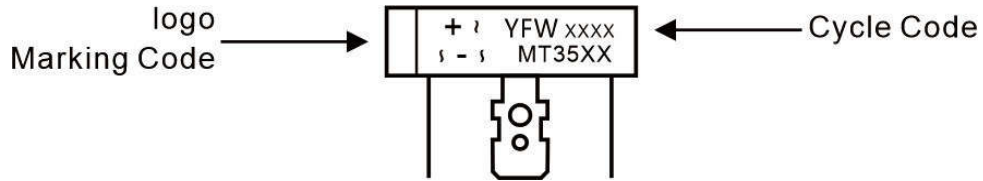


Fig.4. Transient thermal impedance

Marking Diagram



Ordering information

| Package | Packing Description | Packing Quantity |
|---------|---------------------|-------------------------|
| MT | bulk | 50PCS/Box 500PCS/Carton |

Package Dimensions

MT

| Dim. | Millimeter(mm) | | Dimensions inInch | |
|------|----------------|------|-------------------|------|
| | Min. | Max. | Min. | Max. |
| A | 23.1 | 24.1 | 0.91 | 0.95 |
| B | 23.1 | 24.1 | 0.91 | 0.95 |
| C | 28.2 | 28.8 | 1.11 | 1.13 |
| D | 16 | 17 | 0.63 | 0.67 |
| E | 22 | 24 | 0.87 | 0.94 |
| F | 9.4 | 10 | 0.37 | 0.39 |
| G | 6.2 | 6.4 | 0.24 | 0.25 |
| H | 0.75 | 0.85 | 0.03 | 0.03 |

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