

**Three Phase Glass Passivated Bridge Rectifier**

**V<sub>RRM</sub> - 800 to 1600 V**

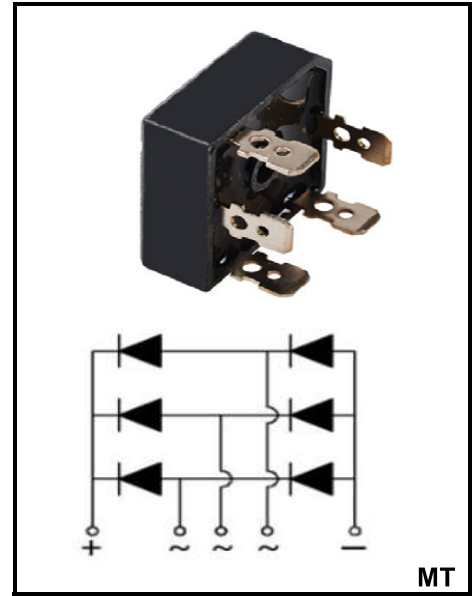
**I<sub>(AV)</sub> - 35A**

**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 <sub>RRM</sub>	800	1000	1200	1400	1600	V
Average rectified output current	with heatsink, T <sub>c</sub> =85°C	I <sub>(AV)</sub>	35					A
Peak surge forward current, 8.3ms single half sine-wavesuperimposed on rated load		I <sub>FSM</sub>	400					A
Rating for fusing, 1ms<t<8.3ms, T <sub>j</sub> =25 °C , Rating of per diode		i <sup>2</sup> t	664					A <sup>2</sup> S
Junction temperature and Storage temperature		T <sub>j</sub> , T <sub>stg</sub>	-55~+150					°C
Dielectric strength, terminals to case AC 1 minute		V <sub>DS</sub>	2.0					KV
Peak Forward Voltage @I <sub>F</sub> =17.5A		V <sub>F</sub>	1.1				1.2	V
Peak Reverse Current VR=VRRM.Pulse measurement Rating of per diode	T <sub>j</sub> =25 °C T <sub>j</sub> =125 °C	I <sub>R</sub>	5 500					uA
Junction to ambient thermal resistance,without heatsink		R <sub>θJA</sub>	26					°C/W
Junction to case thermal resistance, with heatsink		R <sub>θJC</sub>	0.95					°C/W

Characteristics (Typical)

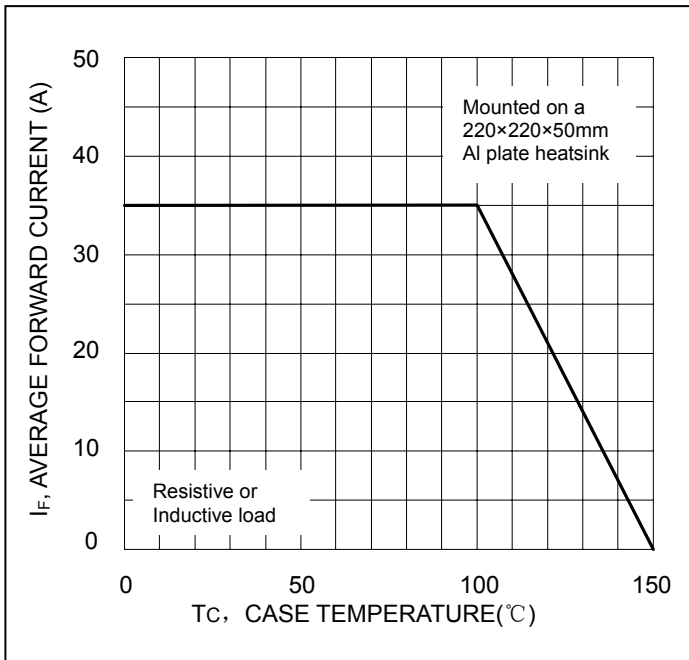


Fig. 1 Forward Current Derating Curve

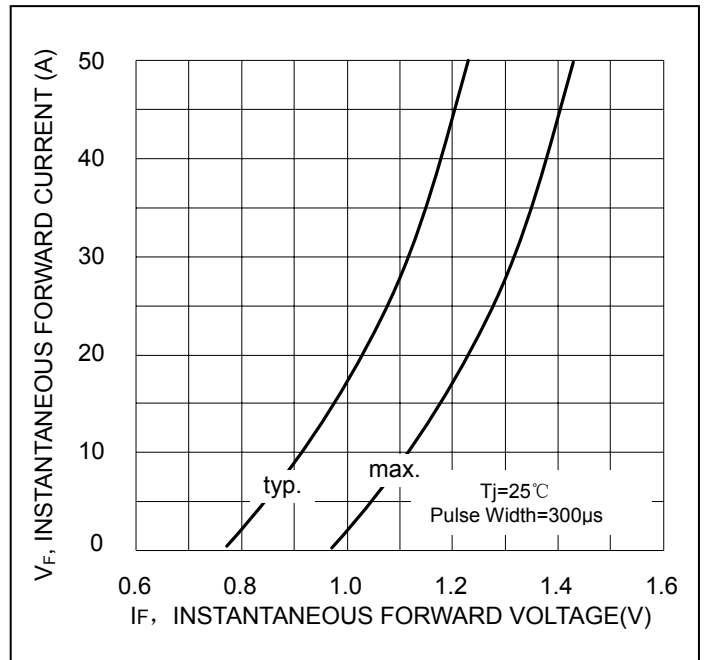


Fig.2 Typical Forward Characteristics

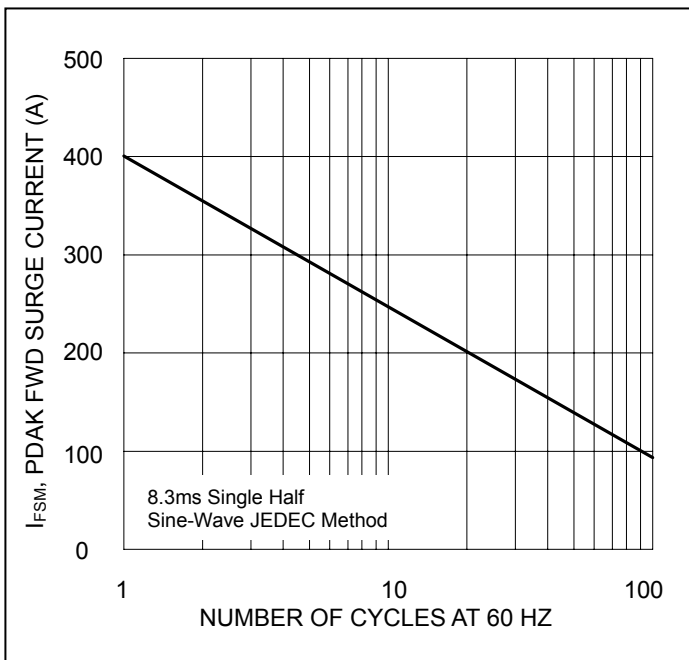


Fig.3 Max Non-Repetitive Peak Surge Current

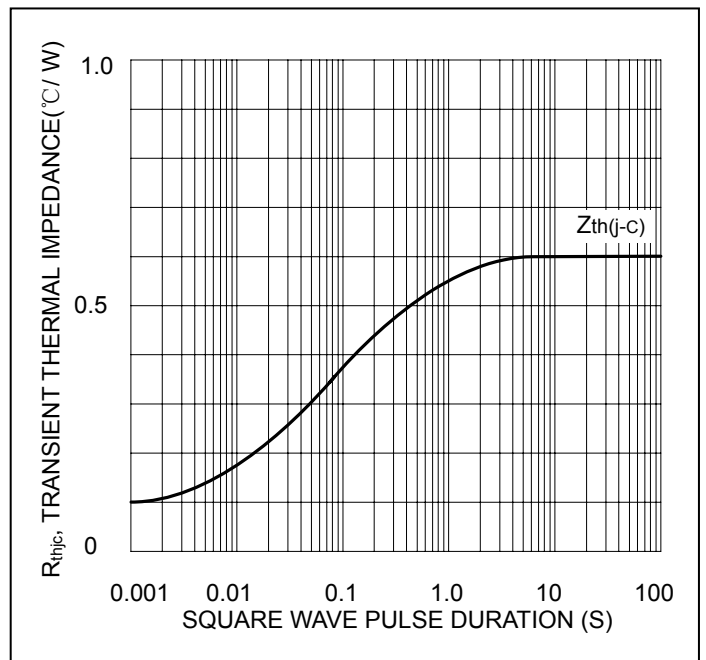
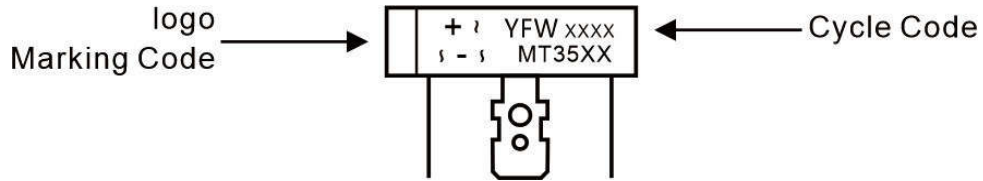


Fig.4. Transient thermal impedance

**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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