

35A Three Phase Glass Passivated Bridge Rectifier

Voltage - 800 to 1600 V

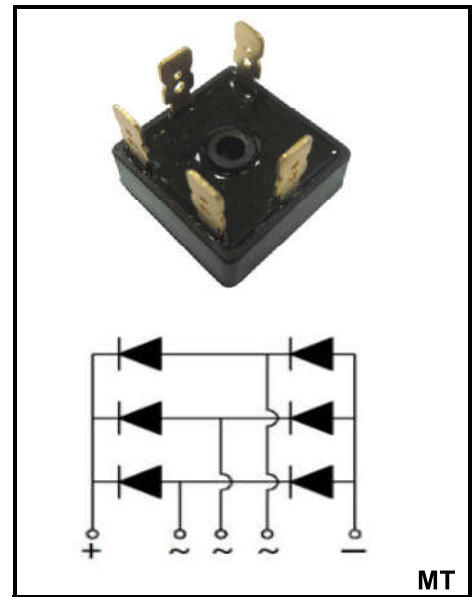
Forward Current – 35A

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)

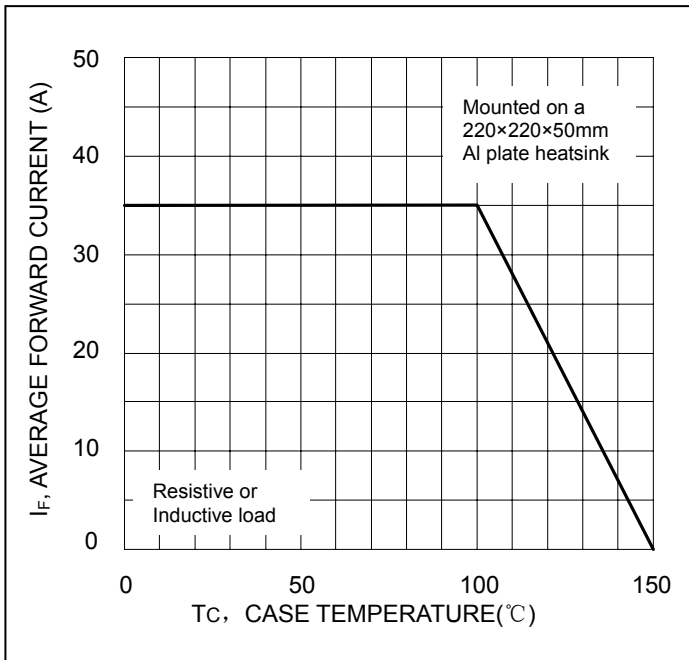


Fig. 1 Forward Current Derating Curve

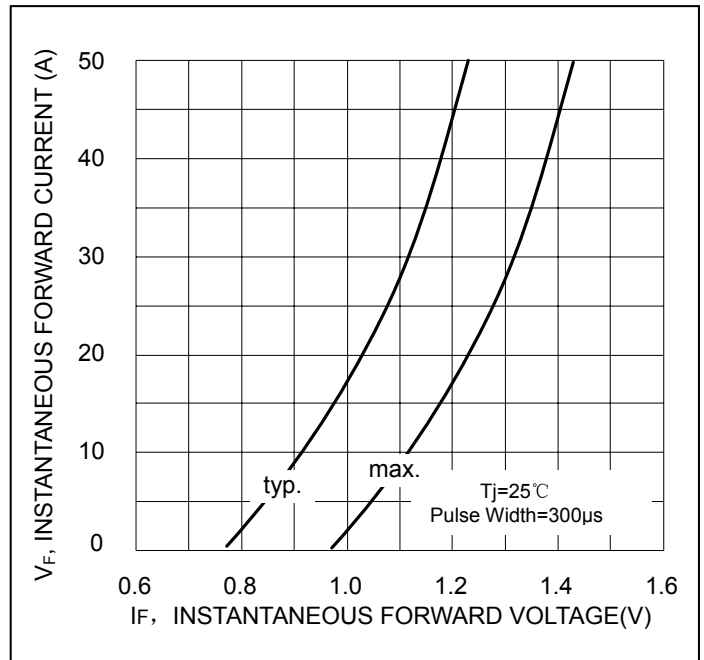


Fig.2 Typical Forward Characteristics

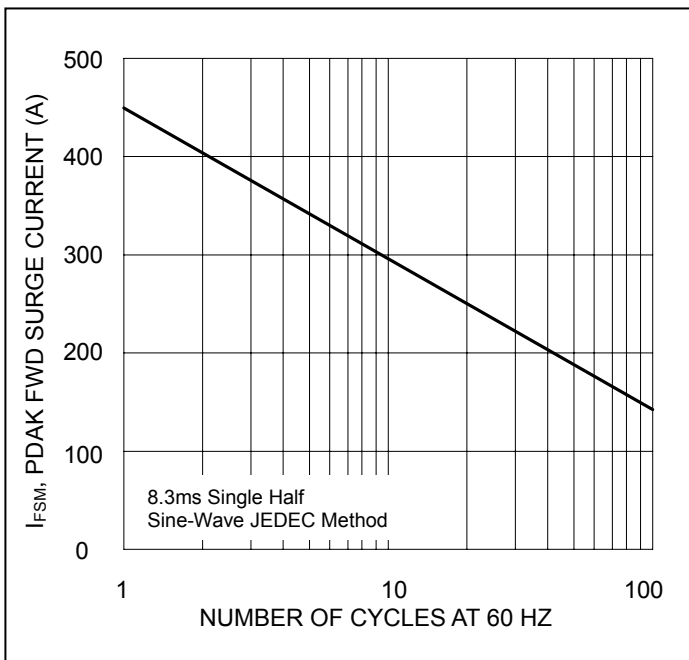


Fig.3 Max Non-Repetitive Peak Surge Current

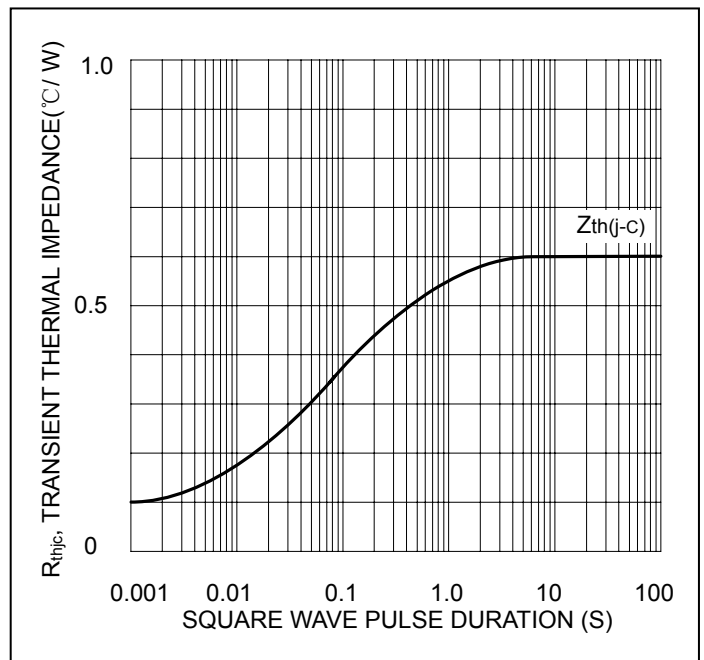
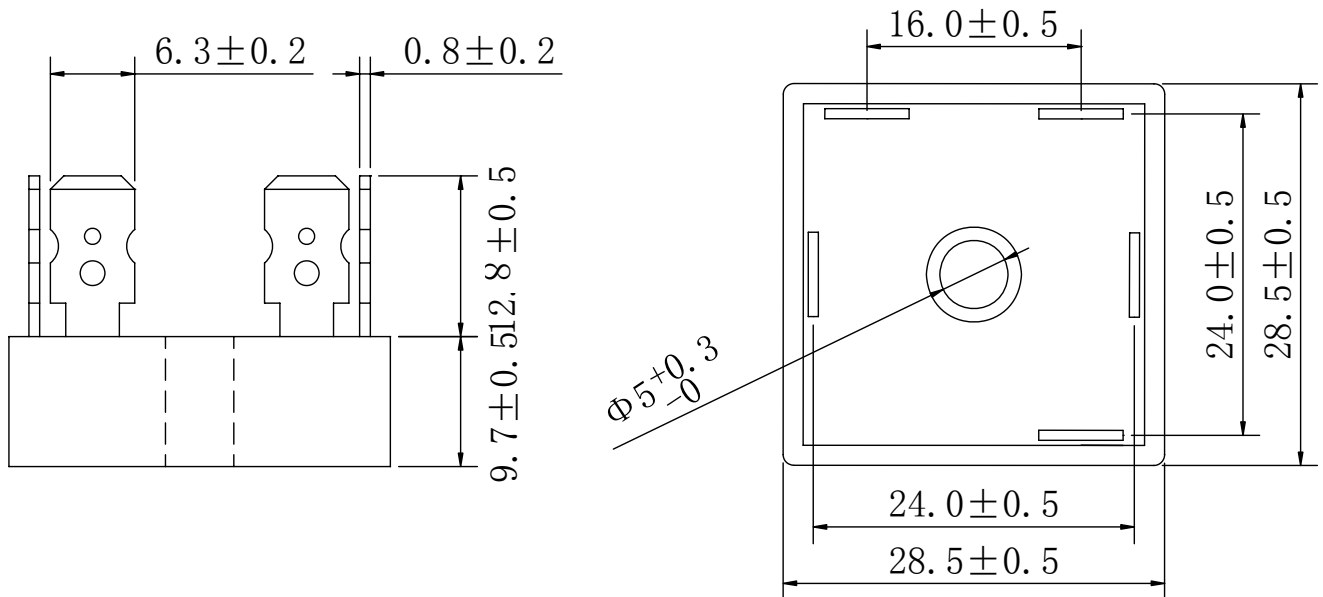


Fig.4. Transient thermal impedance

Dimensioned drawing

MT



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
MT	BOX	50	EIA-481-1