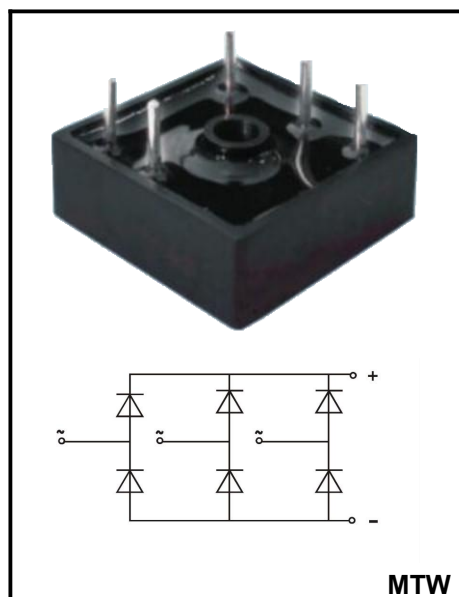


Three Phase Glass Passivated Bridge Rectifier
Voltage - 1000 to 1600 V
Forward Current - 35A
FEATURES

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

MECHANICAL DATA

- ◆Case: MTW
- ◆Terminals: Solderable per MIL-STD-202, Method 208


Maximum Ratings Parameter @ Ta = 25C unless otherwise noted

Parameter		Symbols	MT3510W	MT3512W	MT3514W	MT3516W	Units
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	1000	1200	1400	1600	V
Average rectified output current	with heatsink, $T_c=100^{\circ}\text{C}$	$I_{(AV)}$	35				A
Peak surge forward current, 8.3ms single half sine-wave superimposed on rated load		I_{FSM}	450				A
Rating for fusing, $1\text{ms} < t < 8.3\text{ms}$, $T_j=25^{\circ}\text{C}$, Rating of per diode		I^2t	840				A ² S
Junction temperature and Storage temperature		T_j, T_{stg}	-55~+150				$^{\circ}\text{C}$
Dielectric strength, terminals to case AC 1 minute		Vids	2.5				KV
Peak Forward Voltage @ $I_F=17.5\text{A}$		V_F	1.1				V
Peak Reverse Current $V_R=V_{RRM}$.Pulse measurement Rating of per diode	$T_j=25^{\circ}\text{C}$ $T_j=125^{\circ}\text{C}$	I_R	5 500				μA
Junction to ambient thermal resistance, without heatsink		$R_{\theta JA}$	28				$^{\circ}\text{C/W}$
Junction to case thermal resistance, with heatsink		$R_{\theta JC}$	0.9 ⁽¹⁾				$^{\circ}\text{C/W}$

Device mounted on 124mm x 71mm x 75mm Heat resistance meter radiator

Characteristics (Typical)

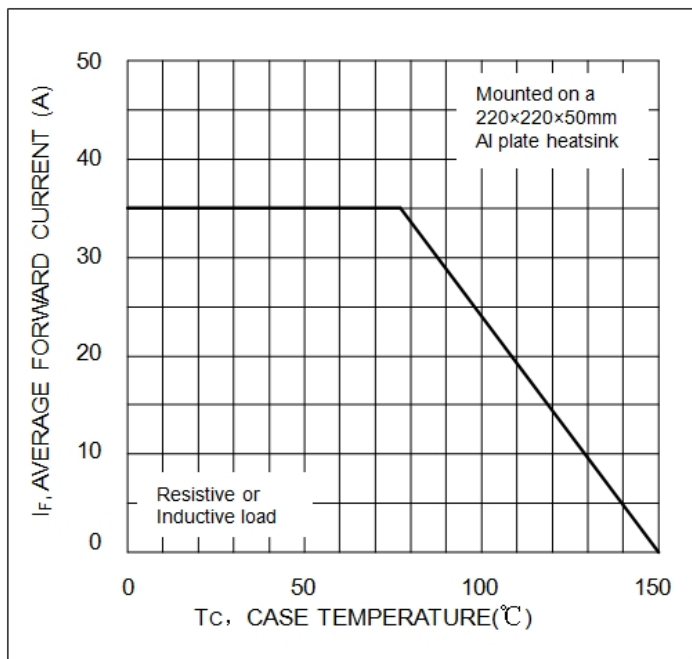


Fig. 1 Forward Current Derating Curve

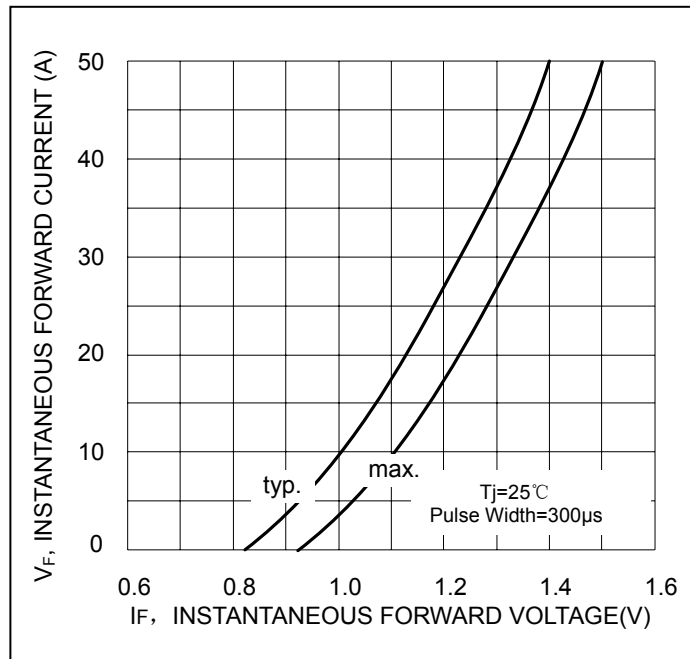


Fig.2 Typical Forward Characteristics

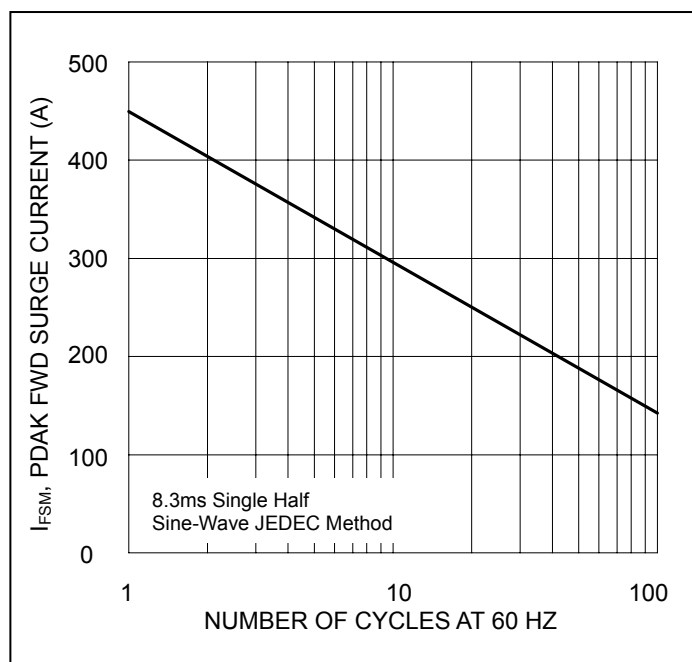


Fig.3 Max Non-Repetitive Peak Surge Current

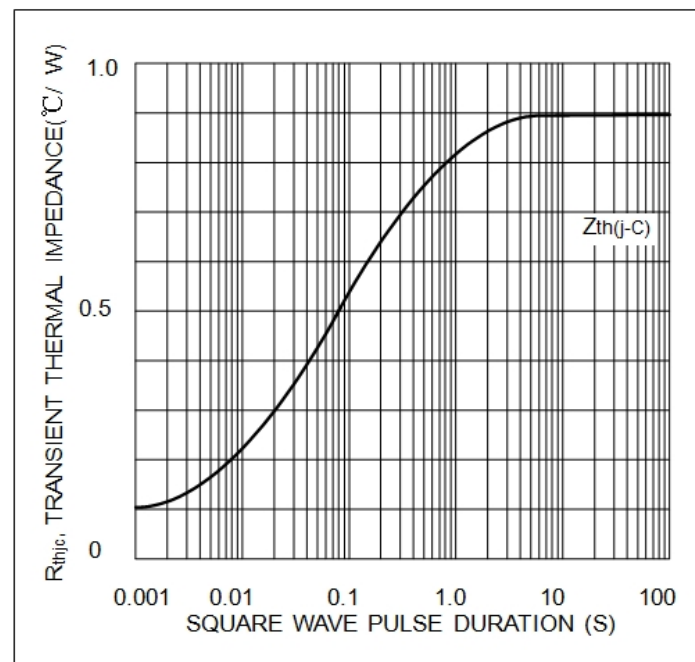
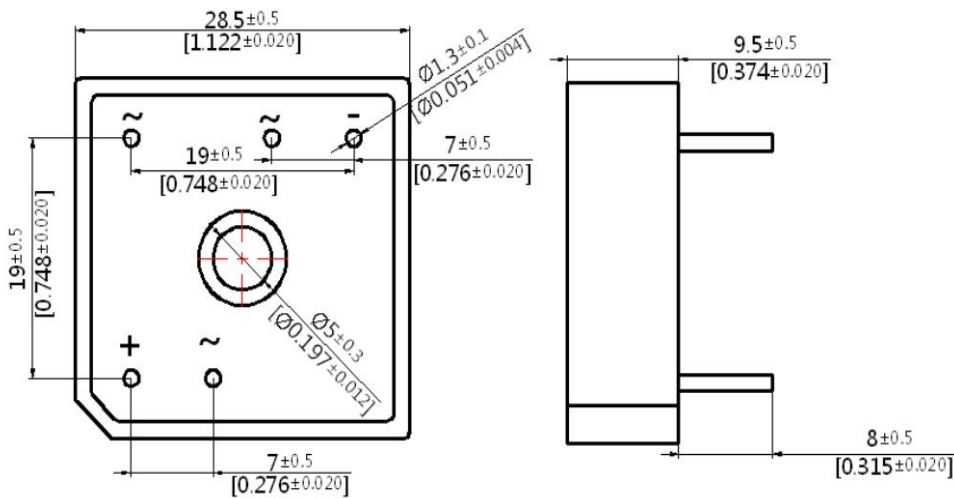


Fig4. Transient thermal impedance

Dimensioned drawingMTW



Summary of Packing Options

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