

35A Three Phase Glass Passivated Bridge Rectifier

Voltage - 800 to 1600 V

Forward Current – 35A

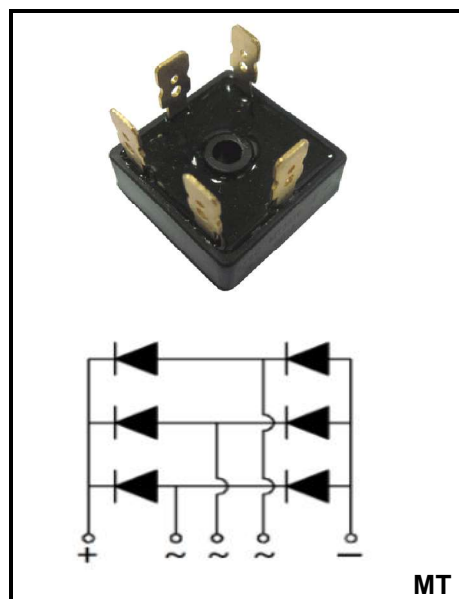
FEATURES

- ♦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, $T_c=85^{\circ}\text{C}$	$I_{(AV)}$	35					A
Peak surge forward current, 8.3ms single half sine-wave superimposed on rated load		I_{FSM}	400					A
Rating for fusing, $1\text{ms} < t < 8.3\text{ms}$, $T_j=25^{\circ}\text{C}$, Rating of per diode		I^2t	664					A^2S
Junction temperature and Storage temperature		T_j, T_{stg}	$-55 \sim +150$					$^{\circ}\text{C}$
Dielectric strength, terminals to case AC 1 minute		V_{DS}	2.0					KV
Peak Forward Voltage @ $I_F=17.5\text{A}$		V_F	1.1				1.2	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		$R_{\theta JA}$	26					$^{\circ}\text{C/W}$
Junction to case thermal resistance, with heatsink		$R_{\theta JC}$	0.95					$^{\circ}\text{C/W}$

FIG1. Derating Curve For Output Rectified Current

图 1. 电流降额曲线

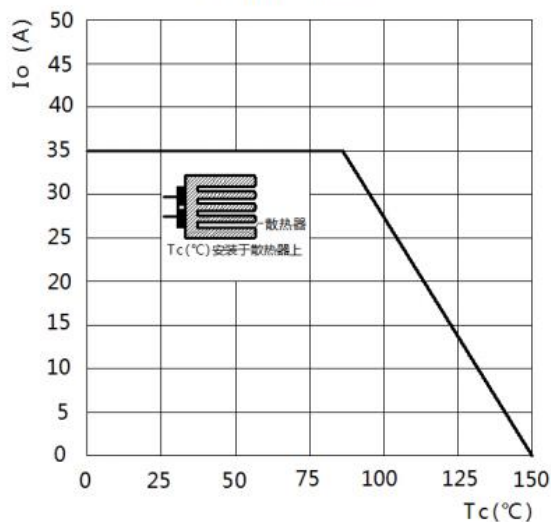
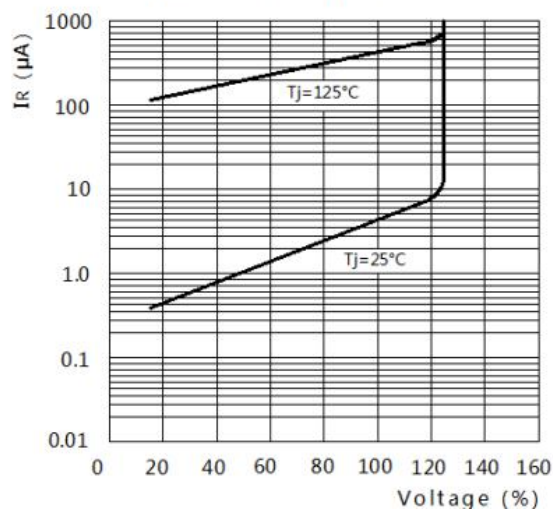


FIG3. Typical Reverse Characteristics Per Bridge Element

图 3. 典型反向特性



Current Per Bridge Element

图 2. 最大正向不重复峰值浪涌电流

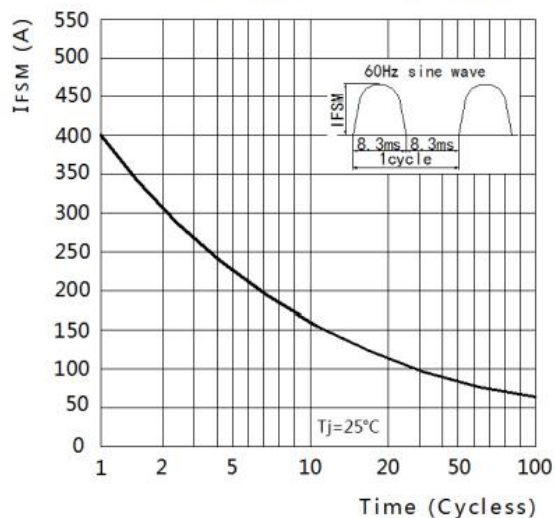
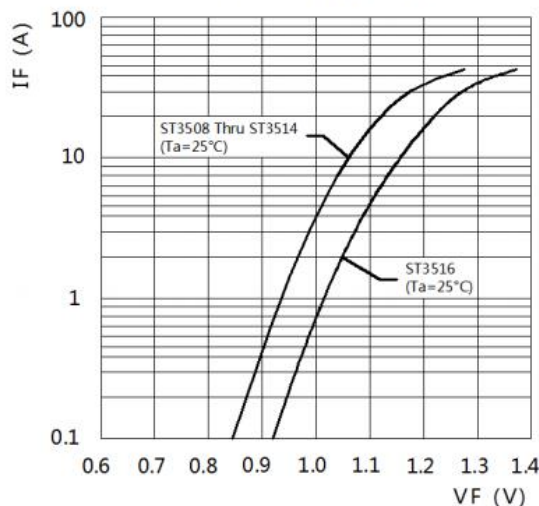
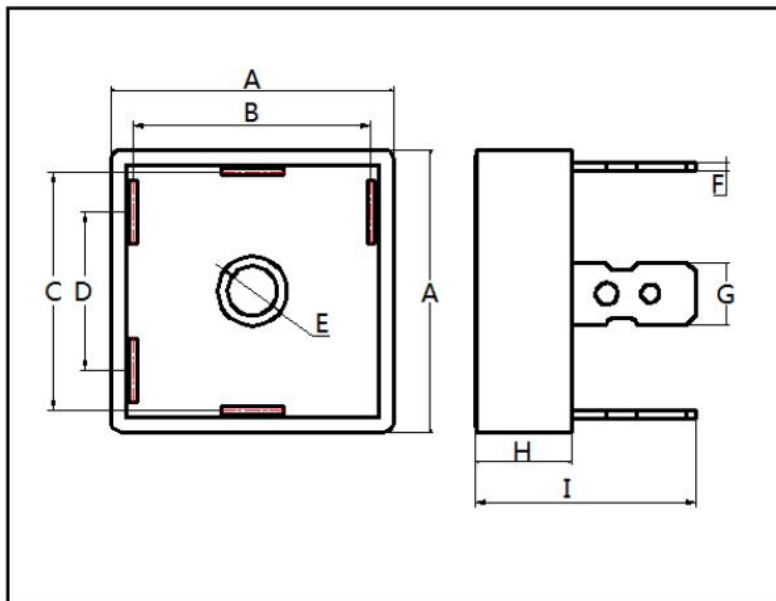


FIG4. Typical Forward Characteristics Per Bridge Element

图 4. 典型正向特性



■尺寸图 Dimension Drawing



Dim.	Unit(mm)		Unit(inch)	
	Min.	Max.	Min.	Max.
A	28.00	29.00	1.102	1.142
B	23.70	24.70	0.933	0.972
C	23.70	24.70	0.933	0.972
D	15.50	16.50	0.610	0.650
E	4.50	5.50	0.177	0.217
F	0.60	1.00	0.024	0.039
G	6.10	6.50	0.240	0.256
H	9.50	10.50	0.374	0.413
I	21.30	23.30	0.839	0.917