

25Amp Bridge Rectifiers

FEATURES :

- Glass passivated chip
- Low forward voltage drop
- High surge current capability
- Compliant to RoHS directive 2011/65/EU

V _{RRM}	800-1600V
I _{F(AV)}	25A
I _{FSM}	400A

Applications :

- Industrial power supply
- Industrial automation equipment
- Electric welding machine



MECHANICAL DATA :

- Case : GBPC-W
- Polarity : Polarity symbols being marked on body



MAXIMUM RATINGS (Ratings at 25 °C ambient temperature unless otherwise specified)
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Characteristic	Symbol	MT2508W	MT2510W	MT2512W	MT2514W	MT2516W	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	800	1000	1200	1400	1600	V
Peak Forward Voltage I _F =12.5A	V _F	1.1				1.2	V
Average rectified output current with heatsink, T _C =85°C	I _(AV)	25					A
Peak surge forward current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	400					A
Rating for using, 1ms<t<8.3ms, T _j =25 °C, Rating of per diode	I ² t	508					A ² s
Dielectric strength, terminals to case AC 1 minute	V _{dis}	2.5					KV
Peak Reverse Current V _R =V _{RRM} , Pulse measurement Rating of per diode (T _j =25 °C / 125 °C)	I _R	5 / 500					uA

MT2508W thru MT2516W

Junction temperature	T_J	-55~+150	°C
Storage temperature	T_{STG}	-55~+150	°C
Typical thermal resistance	$R_{\theta JA}$ $R_{\theta JC}$	26 0.95	°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-55~+150	°C

RATINGS AND CHARACTERISTICS CURVES

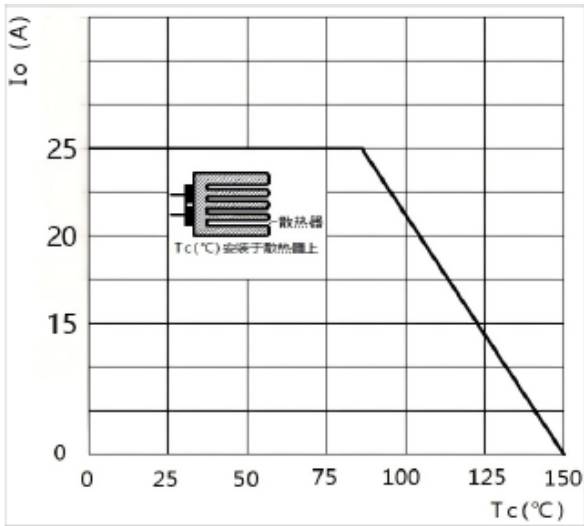


Figure 1. Derating Curve For Output Rectified Current

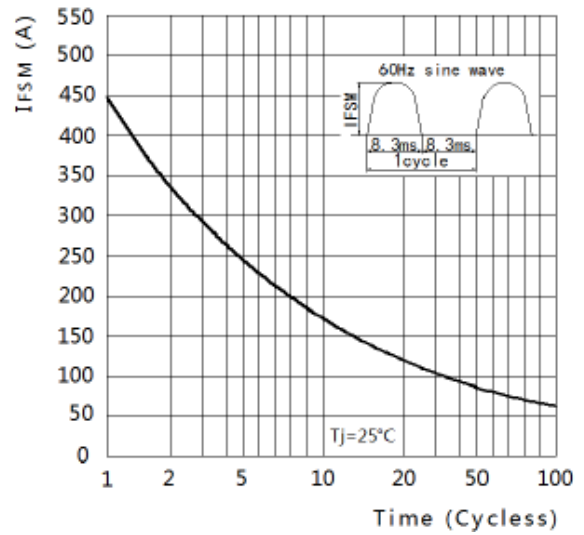


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Bridge Element

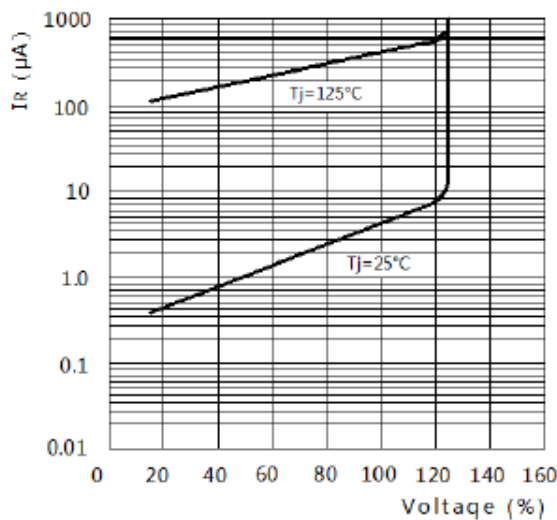


Figure 3. Typical Reverse Characteristics Per Bridge Element

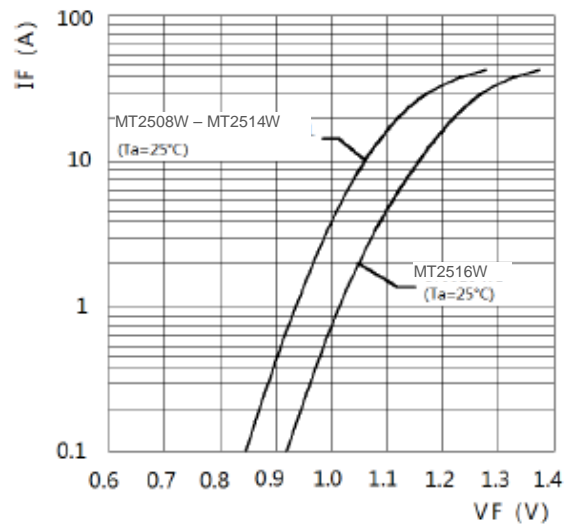
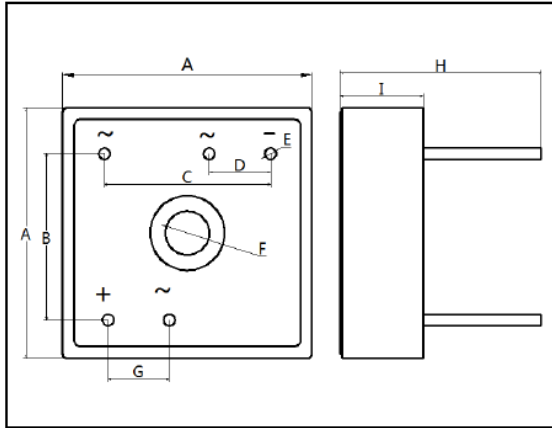


Figure 4. Typical Forward Characteristics Per Bridge Element

MT2508W thru MT2516W

- Package outlines : Dimensions in inches and (millimeters)



Dim.	Unit(mm)		Unit(inch)	
	Min.	Max.	Min.	Max.
A	28.00	29.00	1.102	1.142
B	18.50	19.50	0.728	0.768
C	18.50	19.50	0.728	0.768
D	6.50	7.50	0.256	0.295
E	1.10	1.50	0.043	0.059
F	4.50	5.50	0.177	0.217
G	6.50	7.50	0.256	0.295
H	22.00	24.00	0.866	0.945
I	9.00	10.00	0.354	0.394

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