

EVVOSEMI[®]

THINK CHANGE DO



ESD



TVS



MOS



LDO



Diode



Sensor



DC-DC

Product Specification

▶ Domestic	Part Number	MT3510 THRU MT3516
▶ Overseas	Part Number	MT3510 THRU MT3516
▶ Equivalent	Part Number	MT3510 THRU MT3516

EV is the abbreviation of name EVVO

35A 1000V-1600V 三相玻璃钝化整流桥

■特征 Features

- 玻璃钝化芯片 Glass passivated chip
- 低反向漏电流 Low reverse leakage current
- 高耐浪涌电流能力 High surge current capability

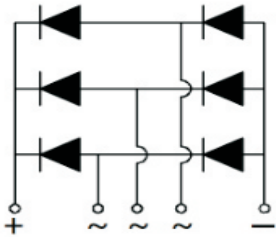
关键参数 KEY PARAMETERS		
参数 PARAMETER	数值 VALUE	单位 UNIT
I _{F(AV)}	35A	
V _{RRM}	1000-1600	V
I _{FSM}	500	A
Package	MT	

■应用范围 Applications 变频器

- Frequency converter
- 工业电源 Industriad power supply

■机械参数 Mechanical Data

- 本体：MT
- Case: MT
- 极性：极性符号铸在管体上
- Polarity: Polarity symbols being marked on body
- 安装扭矩：6.0kgf.cm
- Mounting torque: 6.0kgf.cm max
- 重量：约 18 克
- Weight: About18 grams



■最大额定值 Maximum Ratings @ Ta = 25°C unless otherwise noted

参数 PARAMETER	符号 SYMBOL	MT3510	MT3512	MT3516	单位 UNIT
反向重复峰值电压 Maximum recurrent peak reverse voltage	V _{RRM}	1000	1200	1600	V
平均整流输出电流 Averagerectifiedoutputcurrent	I _(AV)	35			A
带散热片, T _C =85°C with heatsink T _C =85°C					
最大正向浪涌电流, 8.3ms单半正弦波叠加在额定负载上 Peak surge forward current8.3ms single half sinewave superimposed on rated load	I _{FSM}	500			A
热容值, 1ms<t<8.3msT _J =25°C, 单个二极管 Rating for fusing1ms<t<8.3msT _J =25°C, Rating of per diode	I ² t	1037			A ² s
结温 Junction temperature	T _J	-55 ~ +150			°C
存储温度 Storagetemperature	T _{STG}	-55 ~ +150			°C
绝缘耐压, 端子与外壳之间外加交流电 1 分钟 Dielectric strengthterminals to case AC 1 minute	V _{dis}	2.5			KV

■电性特性 Electrical Characteristics @ Ta = 25°C unless otherwise noted

参数 PARAMETER	条件 CONDITIONS		符号 SYMBOL	MT3510	MT3512	MT3516	单位 UNIT
正向峰值电压 Peak Forward Voltage	I _F = 25 A		V _F	1.1		1.2	V
反向峰值电流 Peak Reverse Current	VR=VRRM , 脉冲测试, 单个二极管的 额定值 VR=VRRM , Pulse measurementRating of per diode	Tj=25℃	I _R	5			μA
		Tj=125℃		500			

■热特性 Thermal Characteristics @ Ta = 25°C unless otherwise noted

参数 PARAMETER	符号 SYMBOL	额定值 RATED VALUE	单位 UNIT
结到环境的热阻, 无散热片 Junction to ambient thermal resistance without heatsink	$R_{\theta JA}$	26	$^\circ\text{C/W}$
结到管壳的热阻, 有散热片 Junction to case thermal resistance with heatsink	$R_{\theta JC}$	0.8	$^\circ\text{C/W}$

■特性曲线 Characteristic Curve

FIG1 Derating Curve For Output Rectified Current

图1 电流降额曲线

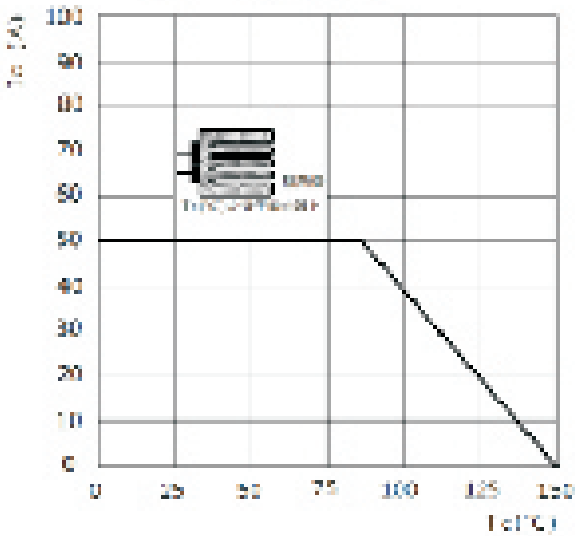


FIG2 Maximum Non-Repetitive Peak Forward Surge Current Per Bridge Element

图2 最大正向非重复峰值浪涌电流

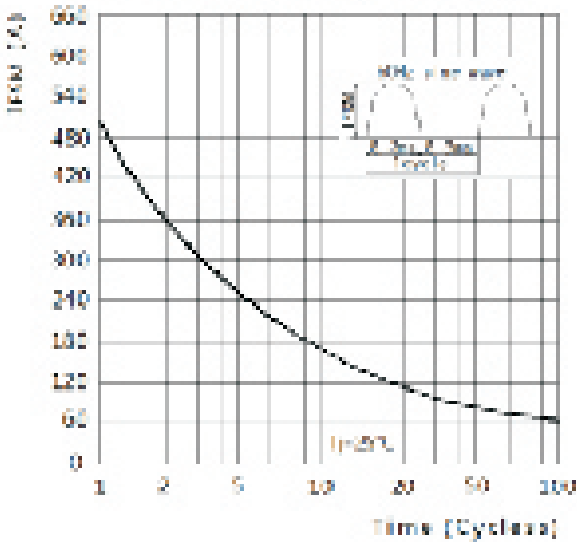


FIG3 Typical Reverse Characteristics Per Bridge Element

图3 典型反向特性

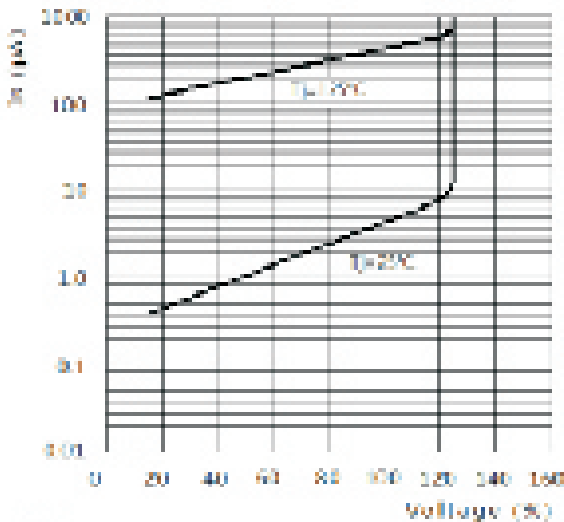
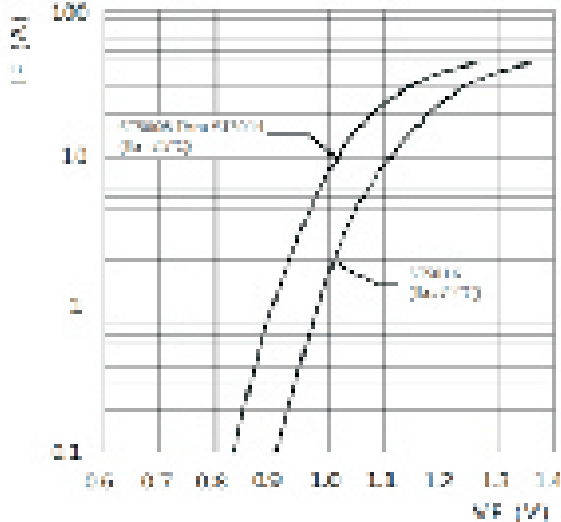


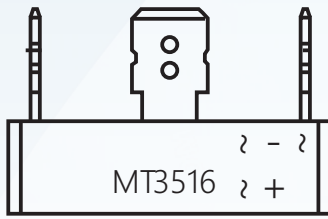
FIG4 Typical Forward Characteristics Per Bridge Element

图4 典型正向特性

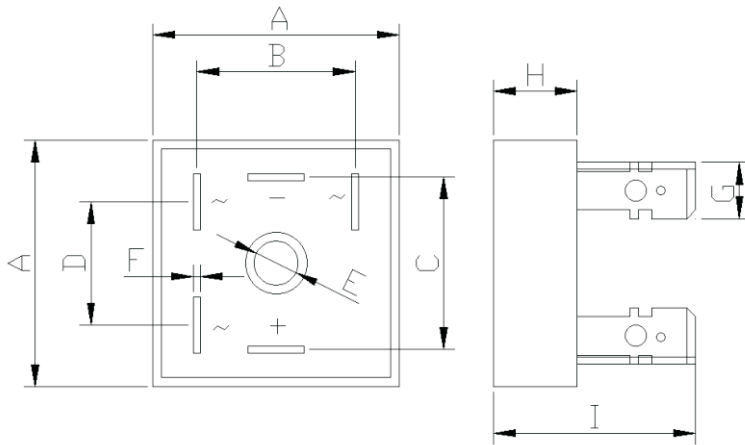


MT3510 THRU MT3516

■标记图 Marking Diagram



■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	0.6972
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

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