

■特征 Features

- 低反向漏电流
Low reverse leakage current
- 高耐浪涌电流能力
High surge current capability
- 符合 RoHS 指令 2011/65/EU
Compliant to RoHS directive 2011/65/EU

■应用范围 Applications

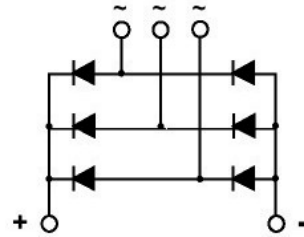
- 工业电源
Industrial power supply
- 工业自动化设备
Industrial automation equipment
- 工业电源
Industrial power supply
- PWM 逆变器直流电源
DC supply for PWM inverter
- 直流电源设备用电源
Supplies for DC power equipment

关键参数 KEY PARAMETERS		
参数 PARAMETER	数值 VALUE	单位 UNIT
$I_{F(AV)}$	100	A
V_{RRM}	800-1600	V
I_{FSM}	1020	A
Package	MDS100	



■机械参数 Mechanical Data

- 本体 : MDS100
- Case : MDS100
- 极性 : 极性符号铸在管体上
Polarity: Polarity symbols being marked on body
- 安装扭矩 : 22.0 kgf.cm
- Mounting torque: 22.0 kgf.cm max
- 重量 : 约 156 克
Weight: About 156 grams



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

参数 PARAMETER	符号 SYMBOL	MDS100 A08	MDS100 A10	MDS100 A12	MDS100 A14	MDS100 A16	单位 UNIT	
反向重复峰值电压 Maximum recurrent peak reverse voltage	V_{RRM}	800	1000	1200	1400	1600	V	
平均整流输出电流 Averagerectified output current	$I_{(AV)}$	带散热片, $T_c=100^\circ\text{C}$ with heatsink, $T_c=100^\circ\text{C}$					100	A
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 current, 8.3ms single half sinewave superimposed on rated load	I_{FSM}						1020	A
热容值, 1ms < t < 8.3ms, $T_j=25^\circ\text{C}$, 单个二极管 Rating for fusing, 1ms < t < 8.3ms, $T_j=25^\circ\text{C}$, Rating of per diode	I^2t						10200	A^2s
结温 Junction temperature	T_j						-40 ~ +150	$^\circ\text{C}$
存储温度 Storage temperature	T_{STG}						-40 ~ +125	$^\circ\text{C}$
绝缘耐压, 端子与外壳之间外加交流电 1 分钟 Dielectric, strength terminals to case AC 1 minute	V_{dis}						2.5	KV

参数 PARAMETER	条件 CONDITIONS	符号 SYMBOL	额定值 RATED VALUE	单位 UNIT
正向峰值电压 Peak Forward Voltage	$I_F = 100A$	V_F	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 measurement Rating of per diode	I_R	Tj=25°C	0.5
			Tj=125°C	10

■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
结到管壳的热阻, 有散热片 Junction to case thermal resistance with heatsink	$R_{\theta JC}$	0.8	°C/W

■特性曲线 Characteristic Curve

FIG1. Derating Curve For Output Rectified Current

图 1. 电流降额曲线

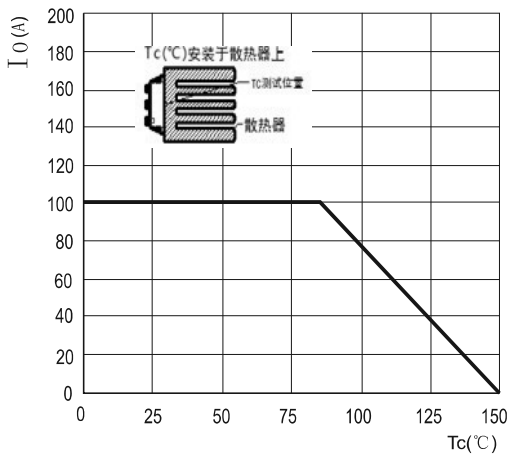


FIG2. Maximum Non-Repetitive Peak Forward Surge Current Per Bridge Element

图 2. 最大正向不重复峰值浪涌电流

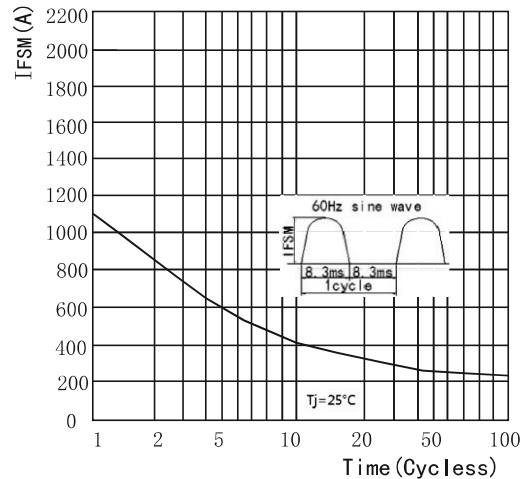


FIG3. Typical Reverse Characteristics Per Bridge Element

图 3. 典型反向特性

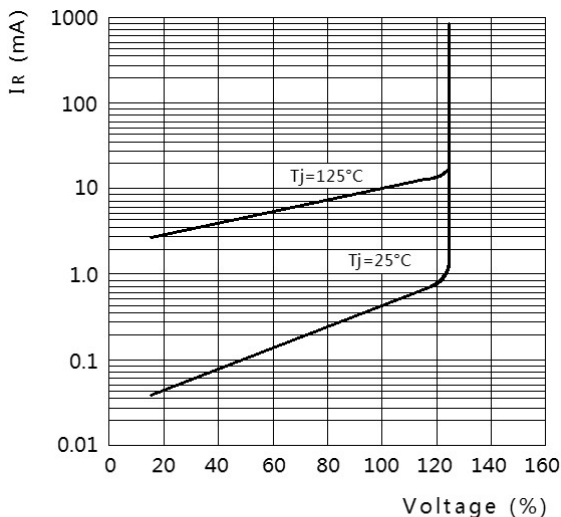
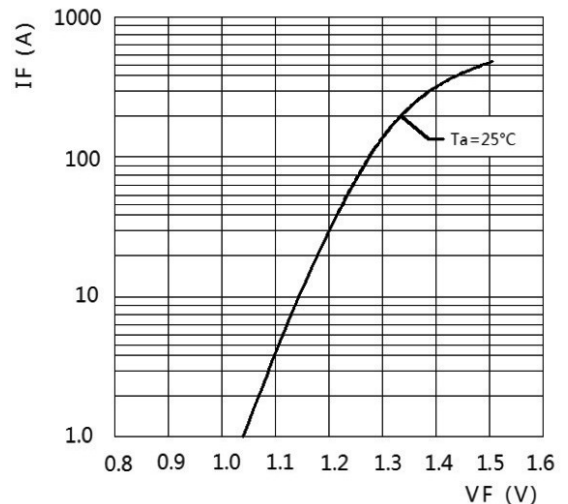
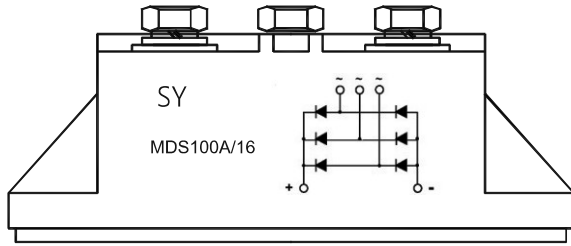


FIG4. Typical Forward Characteristics Per Bridge Element

图 4. 典型正向特性



■ 标记图 Marking Diagram



MDS100A/16 : 标识代码

Marking code

■ 尺寸图 Dimension Drawing

