

■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 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

■机械参数 Mechanical Data

本体 : QL

Case : QL

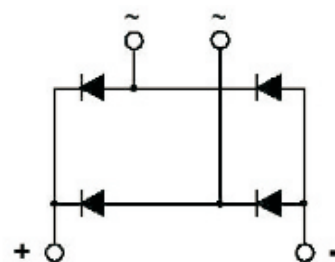
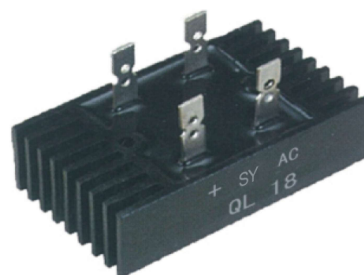
极性 : 极性符号铸在管体上

Polarity: Polarity symbols being marked on body

重量 : 约 230 克

Weight: About 230 grams

关键参数 KEY PARAMETERS		
参数 PARAMETER	数值 VALUE	单位 UNIT
$I_{F(AV)}$	100	A
V_{RRM}	800-1800	V
I_{FSM}	1020	A
Package	QL	



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

参数 PARAMETER	符号 SYMBOL	Q L100A08	Q L100A10	Q L100A12	Q L100A16	Q L100A18	单位 UNIT
反向重复峰值电压 Maximum recurrent peak reverse voltage	V_{RRM}	800	1000	1200	1600	1800	V
平均整流输出电流 Averagerectified output current	$I_{(AV)}$	100					A
带散热片, $T_c=100^\circ\text{C}$ with heatsink, $T_c=100^\circ\text{C}$							
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 current, 8.3ms single half sinewave superimposed on rated load	I_{FSM}	1020					A
热容值, $1\text{ms} < t < 8.3\text{ms}$, $T_j=25^\circ\text{C}$, 单个二极管 Rating for fusing, $1\text{ms} < t < 8.3\text{ms}$, $T_j=25^\circ\text{C}$, Rating of per diode	I^2t	11220					A^2s
结温 Junction temperature	T_j	$-40 \sim +150$					$^\circ\text{C}$
存储温度 Storage temperature	T_{STG}	$-40 \sim +125$					$^\circ\text{C}$
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



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

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	0.5	mA
	$T_J = 25^{\circ}C$		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	$^{\circ}C/W$

■特性曲线 Characteristic Curve

FIG1.Derating Curve For Output Rectified Current

图 1. 电流降额曲线

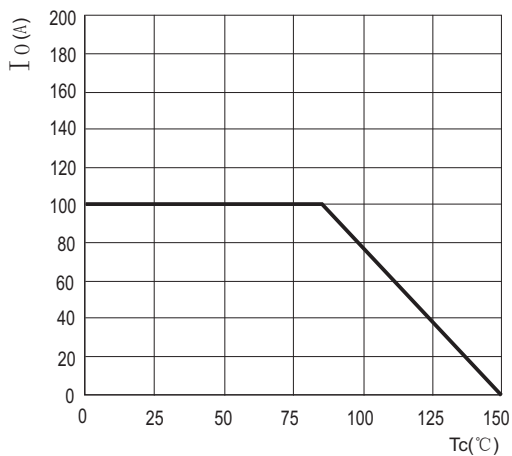


FIG2 .Maximum Non-Repetitive Peak Forward Surge Current Per Bridge Element

图 2. 最大正向不重复峰值浪涌电流

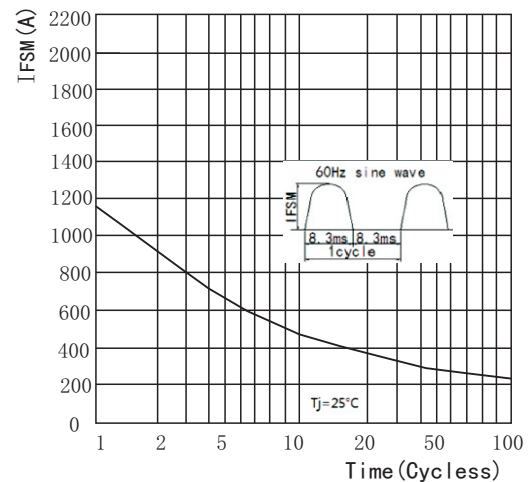


FIG3.Typical Reverse Characteristics Per Bridge Element

图 3. 典型反向特性

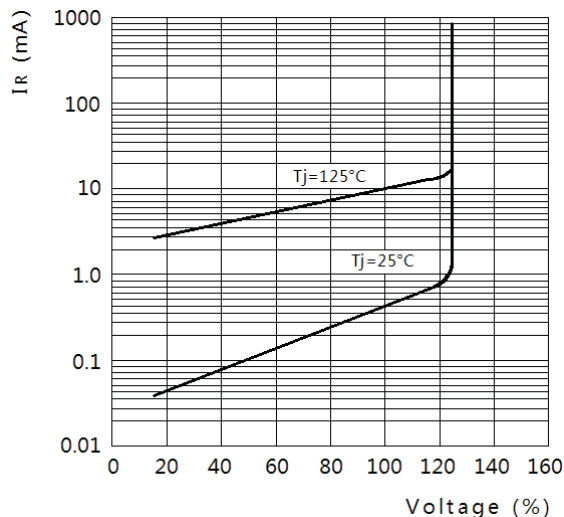
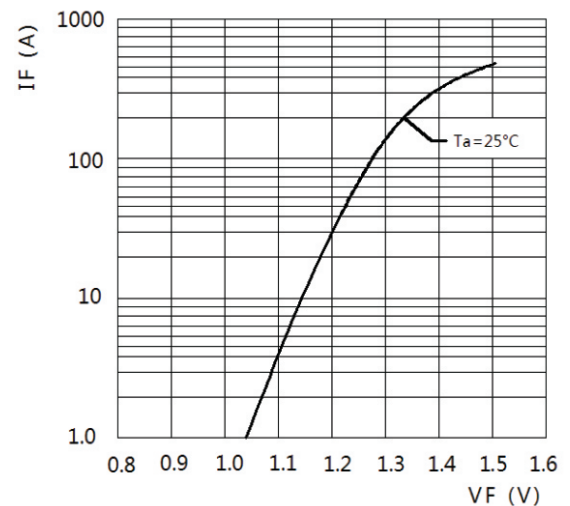


FIG4.Typic al Forward Characteristics Per Bridge Element

图 4. 典型正向特性

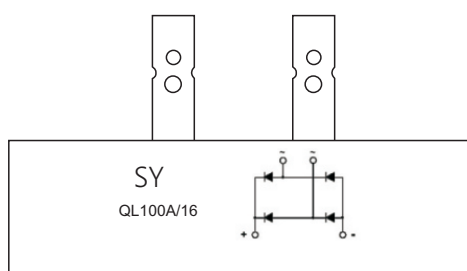




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QL100A08 thru QL100A18

■ 标记图 Marking Diagram



QL100A/16 : 标识代码
Marking code

■ 尺寸图 Dimension Drawing

