

SOT-89-3L TRIAC 双向可控硅

■ Features 特点

Low holding and latching current 低维持和擎住电流

Bidirectional switching and phase control 双向开关和相位控制

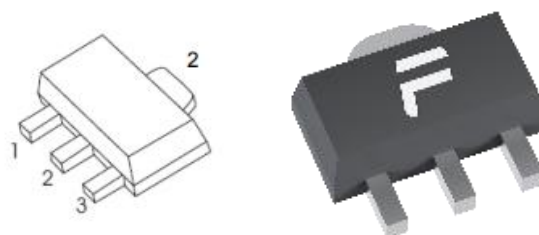
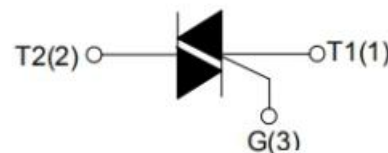
Glass passivated Process 玻璃钝化工艺

■ Applications 应用

Microcontrollers 微控制器

Logic integrated circuits 逻辑集成电路

Low power gate trigger circuits 低功率门极触发电路



■ Absolute Maximum Ratings 最大额定值

Characteristic 特性参数	Symbol 符号		Value 额定值	Unit 单位
Peak Repetitive Off-State Voltage 峰值可重复断态耐压	V_{DRM}, V_{RRM}	MAC97A6F MAC97A8F	400 600	V
On-State RMS Current 通态均方根电流	$I_{T(RMS)}$		1	A
On-State Average Current 通态平均电流	$I_{T(AV)}$		1	A
Peak Non-Repetitive Surge Current @25°C 峰值不可重复浪涌电流	I_{TSM}		10	A
Circuit Fusing Considerations(t=10ms) 电路保险指数	I^2t		1.28	A ² s
Peak Gate Current-Forward (Pulse Width ≤1 us) 正向门极峰值电流	I_{GM}		2	A
Peak Gate Voltage-Reverse (Pulse Width ≤1 μs) 反向门极峰值电压	V_{GRM}		5	V
Forward Peak Gate Power (Pulse Width ≤1 μs) 正向门极峰值功率	P_{GM}		5	W
Forward Average Gate Power (t=8.3ms) 正向门极平均功率	$P_{G(AV)}$		0.5	W
Critical rate of rise of on-state current 通态电流上升率	dI/dt	I II III IV	50 10	A/us
Thermal Resistance J-C 结到管壳热阻	$R_{\theta JC}$		31	°C/W

■Electrical Characteristics 电特性

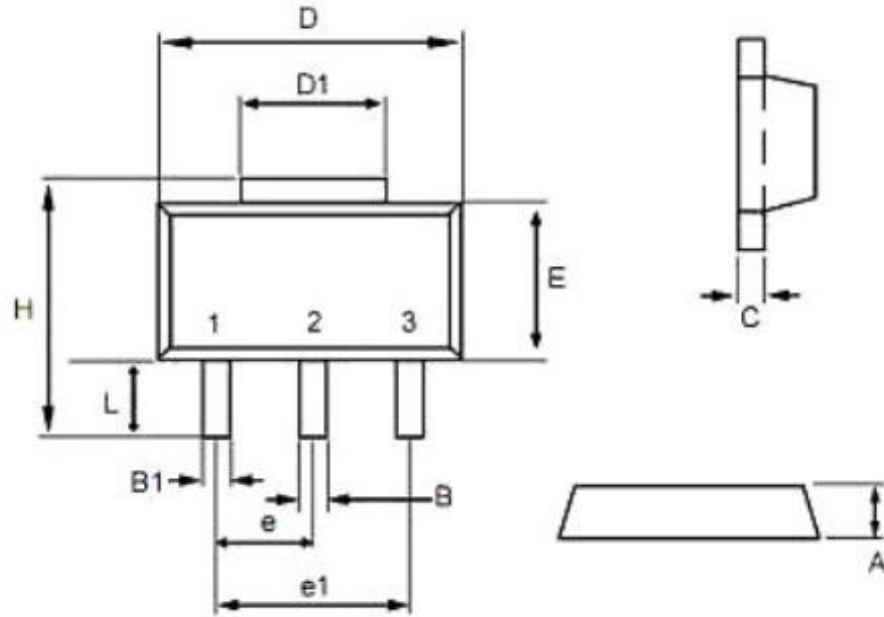
 (T_A=25°C unless otherwise noted 如无特殊说明, 温度为 25°C)

Characteristic Parameters 特性参数	Symbol 符号	Min 最小值	Max 最大值	Unit 单位	Condition 条件
Peak Forward Blocking Current 峰值正向漏电流	I _{DRM}	T _c =25°C T _c =125°C	5 500	μA	V _D =V _{DRM}
Peak Reverse Blocking Current 峰值反向漏电流	I _{RRM}	T _c =25°C T _c =125°C	5 500	μA	V _R =V _{RRM}
Peak Forward On-State Voltage 峰值正向通态电压	V _{TM}		1.7	V	I _{TM} =1.4A
Gate Trigger Current 触发电流	I _{GT}	I II III IV	5 10 20	mA	V _D =12V R _L =33Ω
Gate Trigger Voltage 触发电压	V _{GT}		1.3	V	V _D =12V R _L =33Ω
Holding Current 维持电流(T/D)	I _H		5/7	mA	I _T =100mA
Latch Current 擎住电流(T/D)	I _L	I III IV II	5/5 10/20	mA	I _G =1.2I _{GT}
Off-state Voltage Change 断态电压临界上升率(T/D)	dv/dt	20/50		V/μS	V _D =2/3V _{DRM}
Gate Nun Trigger Voltage 门极不触发电压	V _{GD}	0.2		V	V _D =V _{DRM}

■Device Marking 产品打标

Type	MAC97A6F	MAC97A8F
Mark	MAC97A6	MAC97A8

■ Dimension 外形封装尺寸



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.40	1.60	0.055	0.063
B	0.40	0.56	0.016	0.022
B1	0.35	0.48	0.014	0.019
C	0.35	0.44	0.014	0.017
D	4.40	4.60	0.173	0.181
D1	1.35	1.83	0.053	0.072
e	1.45	1.55	0.057	0.061
e1	2.95	3.05	0.116	0.120
E	2.29	2.60	0.090	0.102
H	3.75	4.25	0.148	0.167
L	0.80	1.20	0.031	0.047