

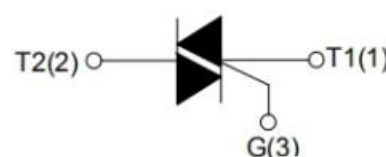
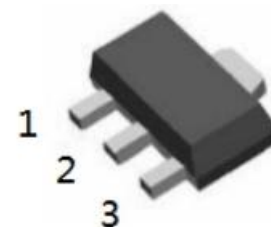
SOT-89 TRIAC 双向可控硅

■ 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

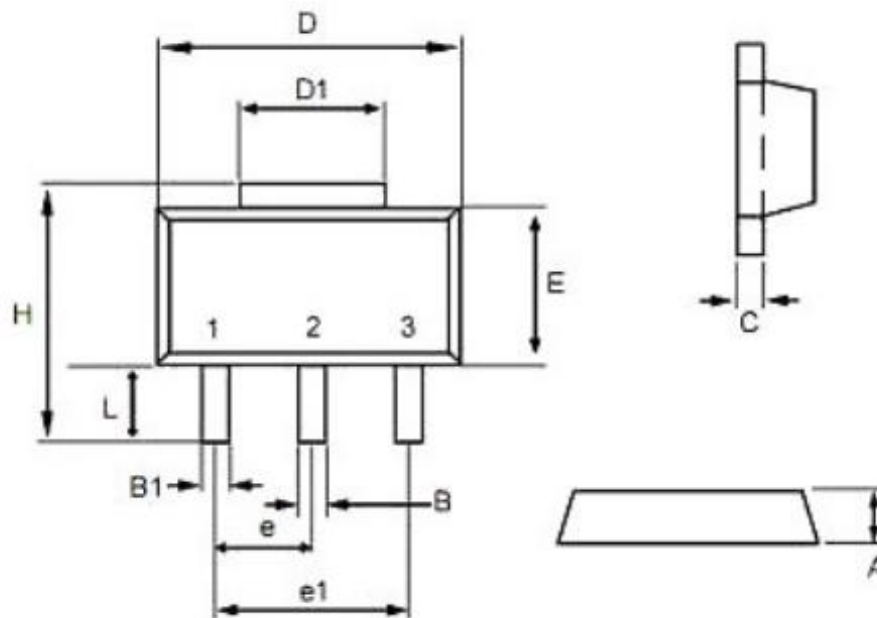
($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

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}	$T_c=25^{\circ}\text{C}$ $T_c=125^{\circ}\text{C}$	5 500	μA	$V_D=V_{DRM}$
Peak Reverse Blocking Current 峰值反向漏电流	I_{RRM}	$T_c=25^{\circ}\text{C}$ $T_c=125^{\circ}\text{C}$	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	$I_{TM}=1.4\text{A}$
Gate Trigger Current 触发电流	I_{GT}	I II III IV	5 10 20	mA	$V_D=12\text{V}$ $R_L=33\Omega$
Gate Trigger Voltage 触发电压	V_{GT}		1.3	V	$V_D=12\text{V}$ $R_L=33\Omega$
Holding Current 维持电流(T/D)	I_H		5/7	mA	$I_T=100\text{mA}$
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