

SOT-89 SCR 可控硅

Features 特点

PNPN Silicon Controllable rectifier 硅可控整流器

Sensitive Gate Trigger 灵敏的门极触发

Glass passivated Process 玻璃钝化工艺

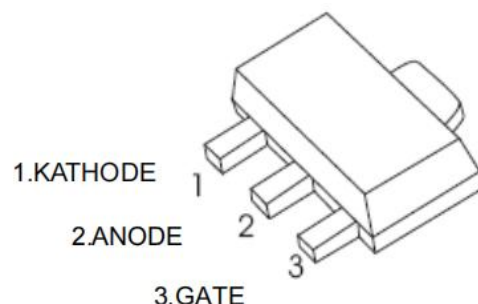
Applications 应用

General Purpose Switching 通用开关

Solid State Relay 固态继电器

Phase Control 相位控制

MARKING:100-8



Absolute Maximum Ratings 最大额定值

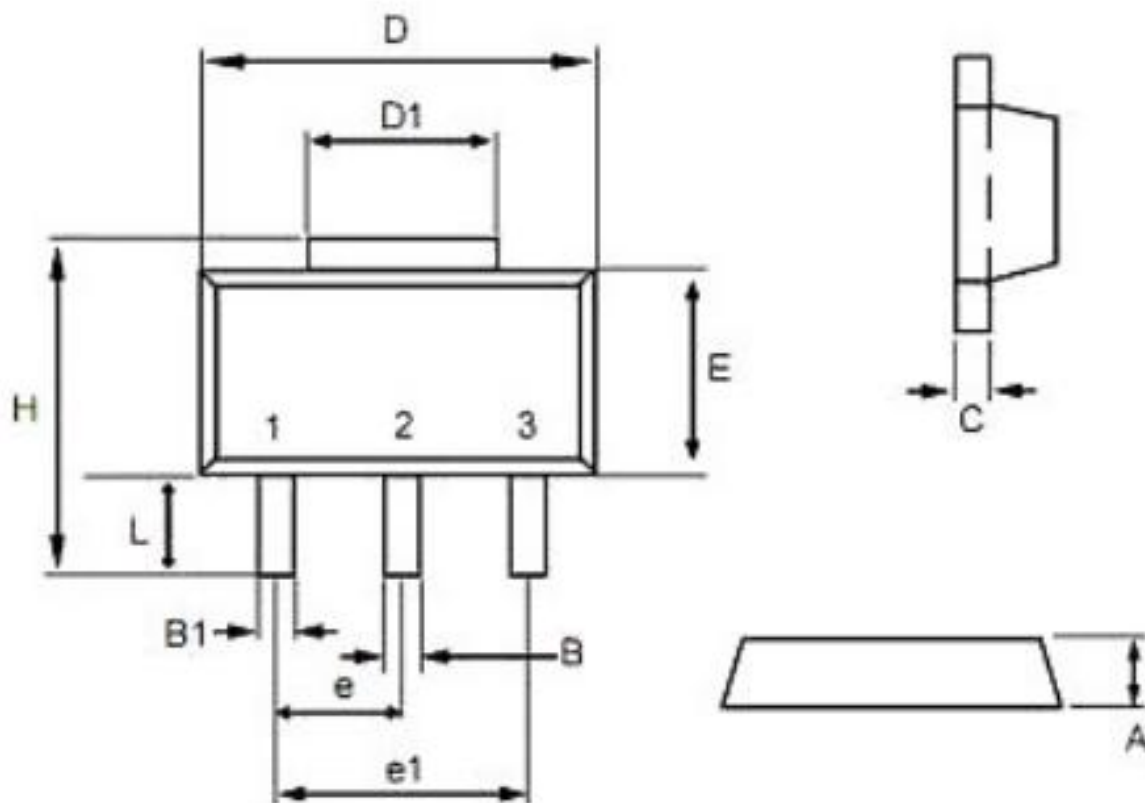
Characteristic 特性参数	Symbol 符号	Value 额定值	Unit 单位
Peak Repetitive Off-State Voltage ($T_J = -40^{\circ}\text{C}$ to 110°C , Sine Wave, 50 to 60 Hz, Gate Open) 峰值可重复断态耐压	$V_{\text{DRM}}, V_{\text{RRM}}$	600	V
On-State RMS Current 通态均方根电流	$I_{\text{T(RMS)}}$	0.8	A
On-State Average Current 通态平均电流	$I_{\text{T(AV)}}$	0.5	A
Peak Non-Repetitive Surge Current @ 25°C 峰值不可重复浪涌电流	I_{TSM}	9	A
Circuit Fusing Considerations($t=10\text{ms}$) 电路保险指数	I^2t	0.35	A^2s
Peak Gate Current-Forward (Pulse Width $\leq 1 \mu\text{s}$) 正向门极峰值电流	I_{GM}	1	A
Peak Gate Voltage-Reverse (Pulse Width $\leq 1 \mu\text{s}$) 反向门极峰值电压	V_{GRM}	5	V
Forward Peak Gate Power (Pulse Width $\leq 1 \mu\text{s}$) 正向门极峰值功率	P_{GM}	0.1	W
Forward Average Gate Power ($t=8.3\text{ms}$) 正向门极平均功率	$P_{\text{G(AV)}}$	0.1	W
Operating Junction/Storage Temperature 结温和储存温度	T_{stg}	$-40 \sim 125$	$^{\circ}\text{C}$

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 =110°C	5 100	μA	V _D =V _{DRM}
Peak Reverse Blocking Current 峰值反向漏电流	I _{RRM}	T _c =25°C T _c =110°C	5 100	μA	V _R =V _{RRM}
Peak Forward On-State Voltage 峰值正向通态电压	V _{TM}		1.6	V	I _{TM} =1A
Gate Trigger Current 触发电流	I _{GT}	5	200	μA	V _{AK} =7V
Gate Trigger Voltage 触发电压	V _{GT}		0.8	V	I _{TM} =0.8A
Holding Current 维持电流	I _H		3	mA	I _T =50mA
Latch Current 擎住电流	I _L		5	mA	I _G =1.2I _{GT}
Off-state Voltage Change 断态电压临界上升率	dv/dt	10		V/μS	V _D =2/3V _{DRM}
Gate Nun Trigger Voltage 门极不触发电压	V _{GD}	0.1		V	V _D =V _{DRM}

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