

描述 / Descriptions

TO-220 塑封封装 双向可控硅。

Triac in a TO-220 Plastic Package.

特征 / Features

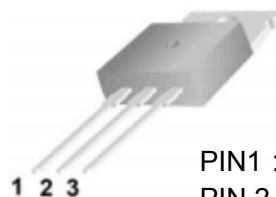
采用玻璃钝化技术，采用环氧塑脂塑料封装，四个信号区都可以满足高灵敏度需要。

glass passivated, sensitive gate triacs in a plastic envelope, where high sensitivity is required in all four quadrants.

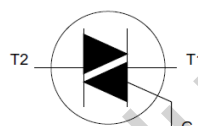
用途 / Applications

用于一般双向开关和相位控制。

Use in general purpose bidirectional switching and phase control applications.



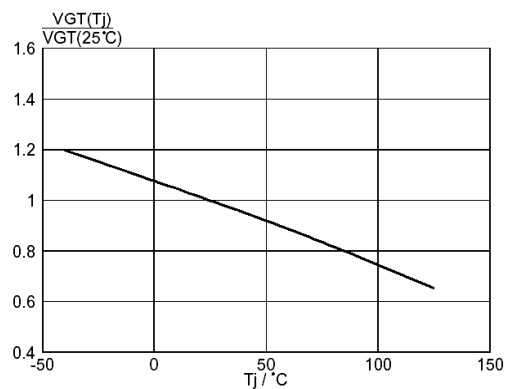
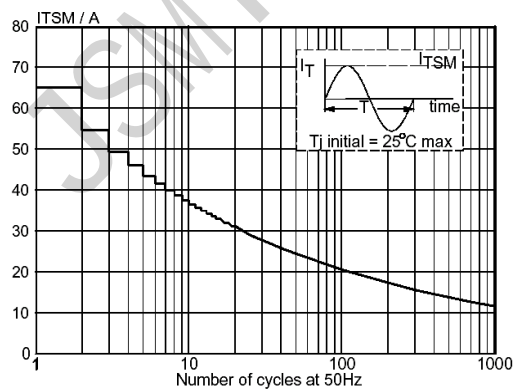
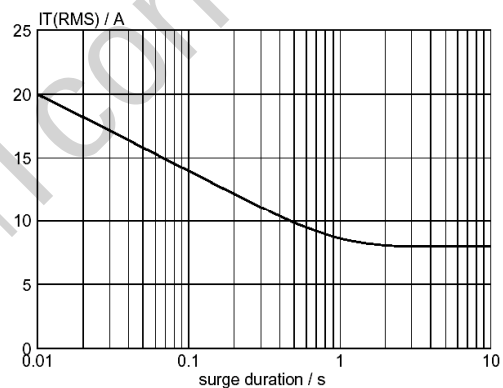
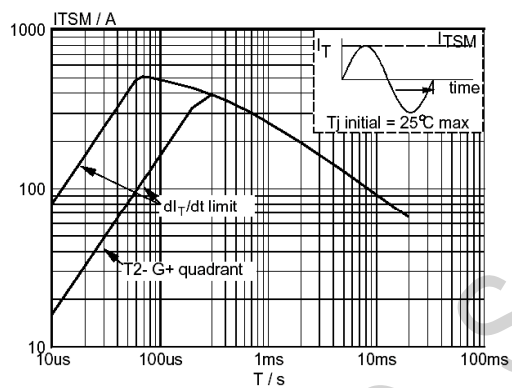
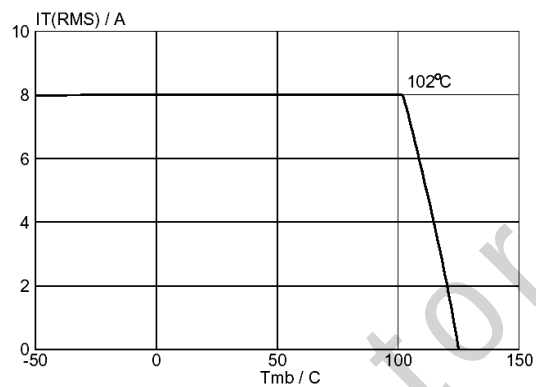
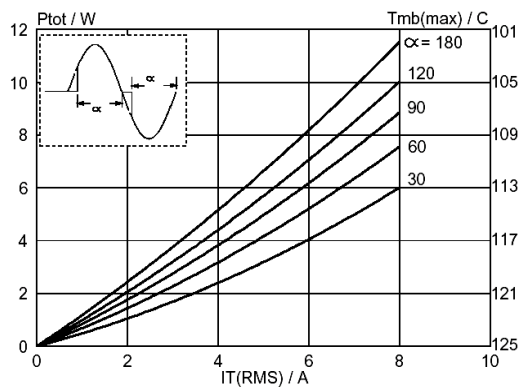
PIN1 : Main Terminal 1
PIN 2 : Main Terminal 2
PIN 3 : Gate


极限参数 / Absolute Maximum Ratings(Ta=25°C)

参数 Parameter		符号 Symbol	数值 Rating		单位 Unit
			600	800	
Repetitive peak off-state voltages		$V_{\text{DRM}}(T_J=25^{\circ}\text{C})$	600	800	V
RMS on-state current		$I_{\text{T(RMS)}}$	8.0		A
Non-repetitive peak on-state current		$I_{\text{TSM}}(t=20\text{ms})$	65		A
Non-repetitive peak on-state current		$I_{\text{TSM}}(t=16.7\text{ms})$	71		A
I^2_{t} for fusing		$I^2_{\text{t}}(t=10\text{ms})$	21		A ² S
Repetitive rate of rise of on-state current after triggering	$I_{\text{TM}}=12\text{A}$ $I_{\text{G}}=0.2\text{A}$ $dI_{\text{G}}/dt=0.2\text{A}/\mu\text{s}$	T2+G+	50		A/μS
		T2+G-	50		A/μS
		T2-G-	50		A/μS
		T2-G+	10		A/μS
Peak gate current		I_{GM}	2.0		A
Peak gate voltages		V_{GM}	5.0		V
Peak gate power		P_{GM}	5.0		W
Average gate power (Over any 20 ms period)		$P_{\text{G(AV)}}$	0.5		W
Junction Temperature		T_{J}	125		℃
Storage Temperature Range		T_{stg}	-40~150		℃
Thermal resistance junction to ambient		$R_{\text{th(j-a)}}$ Full cycle	60		K/W
Thermal resistance junction to mounting base		$R_{\text{th(j-b)}}$ In free air	2.0		K/W

电性能参数 / Electrical Characteristics(Ta=25°C)

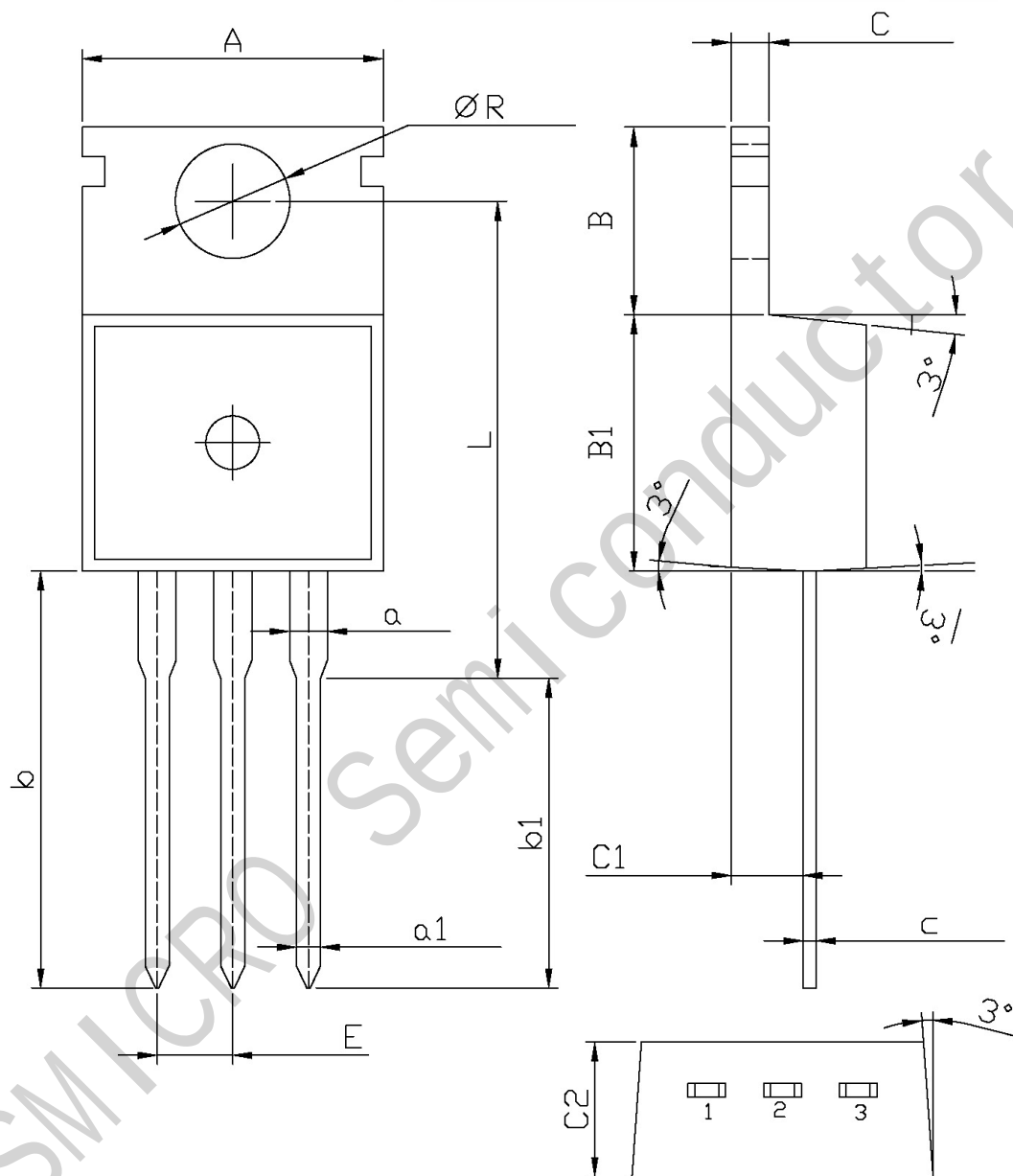
参数 Parameter	符号 Symbol	测试条件 Test Conditions		最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Gate trigger current	I_{GT}	$V_D=12V$ $I_T=0.1A$	T2+G+		2.5	10	mA
			T2+G-		4.0	10	
			T2-G-		5.0	10	
			T2-G+		11	25	
Latching current	I_L	$V_D=12V$ $I_{GT}=0.1A$	T2+G+		3.0	25	mA
			T2+G-		14	35	
			T2-G-		3.0	25	
			T2-G+		4.0	35	
Holding current	I_H	$V_D=12V$	$I_{GT}=0.1A$		2.5	20	mA
On-state voltage	V_T	$I_T=10A$			1.3	1.65	V
Gate trigger voltage	V_{GT}	$V_D=12V$	$I_T=0.1A$		0.7	1.5	V
		$V_D=400V$	$I_T=0.1A$, $T_J=125^\circ C$	0.25	0.4		
Off-state leakage current	I_D	$V_D=V_{DRM(max)}$	$T_J=125^\circ C$		0.1	0.5	mA
Critical rate of rise of off-state current	t_{gt}	$I_{TM}=12A$	$V_D=V_{DRM}$ $I_G=0.1A$ $di_g/dt=5A/\mu s$		2.0		μs
Repetitive peak off-state current	dV_D/dt	$V_{DM}=67\% V_{DRM(MAX)}$	$T_J=125^\circ C$		50		V/ μs

电参数曲线图 / Electrical Characteristic Curve


外形尺寸图 / Package Dimensions

T0-220

单位: mm



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	9.8	10.2	C	1.2	1.4
R	3.56	3.64	B	6.3	6.7
L	15.7	16.1	B1	9.0	9.4
b	12.6	13.6	C1	2.2	2.6
b1	9.6	10.6	a1	0.7	0.9
a	1.22	1.32	c	0.4	0.6
E	2.34	2.74	C2	4.3	4.7