描述 / Descriptions

TO-92 塑封封装单向可控硅。Thyristor in a TO-92 Plastic Package.

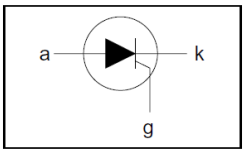
特征 / Features

灵敏的控制级触发电流和很低的维持电流。
Sensitive gate trigger current and Low Holding current.

用途 / Applications

用作一般的开关和相位控制。
Intended for use in general purpose switching and phase control applications.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning

PIN1：Anode　　PIN 2：Gate　　PIN 3：Cathode

放大及印章代码 / h_{FE} Classifications & Marking

见印章说明。See Marking Instructions.

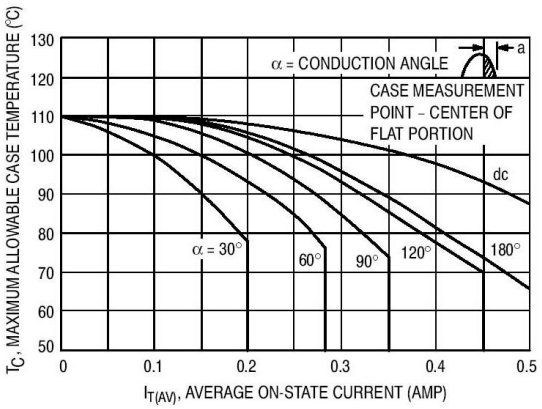
极限参数 / Absolute Maximum Ratings(Ta=25℃)

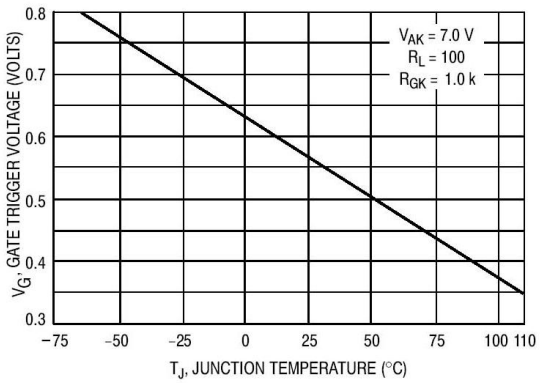
参数 Parameter	符号 Symbol	测试条件 Test Conditions		数值 Rating	单位 Unit
Repetitive peak off-state voltages	V_{DRM}, V_{RRM}			200	V
RMS on-state current	$I_{T(RMS)}$			0.8	A
Average on-state current	$I_{T(AV)}$	Half sine wave	T_C≤67℃	0.51	A
			T_C≤102℃	0.255	
Repetitive peak on-state current	I_{TRM}			8.0	A
Non-repetitive peak on-state current	I_{TSM}	T_a≤25℃ t=8.3ms		10	A
I^2t for fusing	I^2t	t=8.3ms		0.4	A^2S
Peak gate current	I_{GM}	T_a=25℃ t_p=300μs, f=120Hz		1	A
Peak gate power	P_{GM}	T_a=25℃		0.1	W
Junction Temperature	T_j			-65～125	℃
Storage Temperature Range	T_{stg}			-65～150	℃

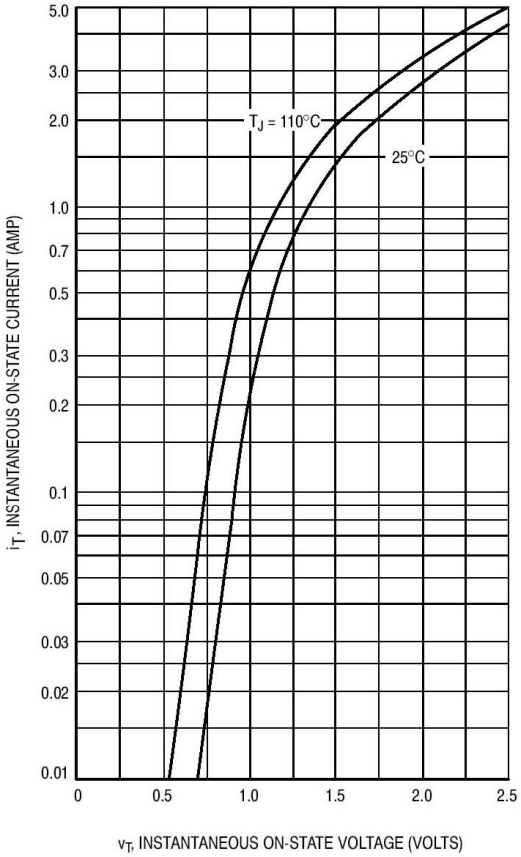
电性能参数 / Electrical Characteristics(Ta=25℃)

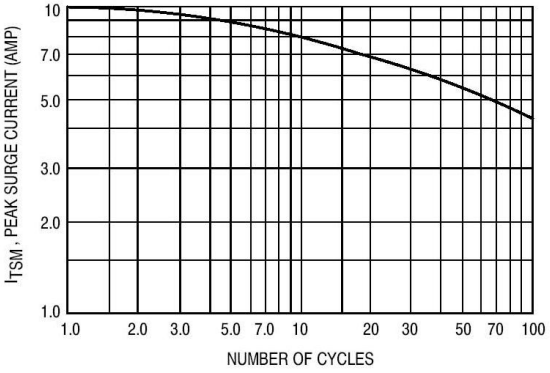
参数 Parameter	符号 Symbol	测试条件 Test Conditions		最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Gate trigger current	I_{GT}	V_D=$V_{DRM(max)}$ R_L=100Ω gate open circuit	Tc =25℃			200	μA
			Tc=-65℃			350	
Latching current	I_L	V_D=12V R_{GK}=1KΩ				6.0	mA
Holding current	I_H	V_D=12V R_{GK}=1KΩ				5.0	mA
On-state voltage	V_T	I_T=1.2A peak t_p=300μs δ≤0.01				1.7	V
Gate trigger voltage	V_{GT}	V_D=$V_{DRM(max)}$ R_L=100Ω; gate open circuit	Tc =25℃			0.8	V
			Tc =-65℃			1.2	
			Tc=125℃	0.1			
Off-state leakage current	I_D,I_R	V_D=$V_{DRM(max)}$ V_R=$V_{RRM(max)}$	Tc =25℃			10	μA
			Tc=125℃			50	
Critical rate of rise of off-state voltage	dv/dt	T_C=25℃ T_j=125℃ V_{DM}=67%$V_{DRM(max)}$ R_{GK}=1KΩ exponential waveform			25		V/us

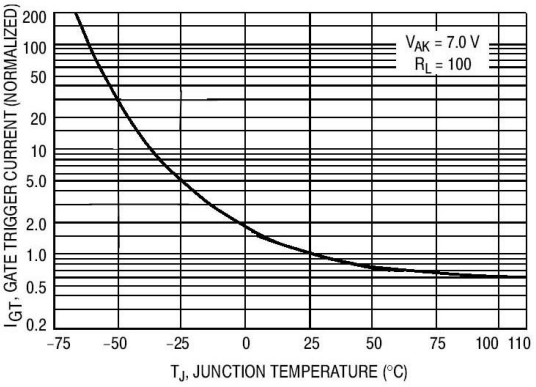
电参数曲线图 / Electrical Characteristic Curve

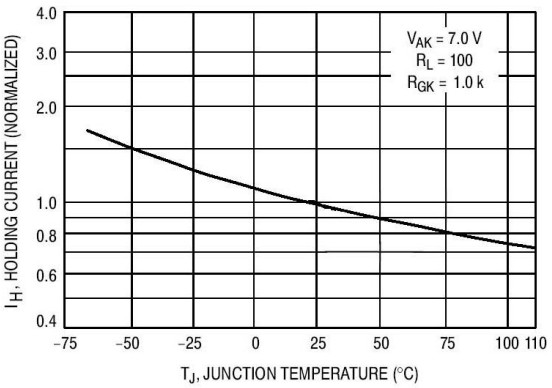






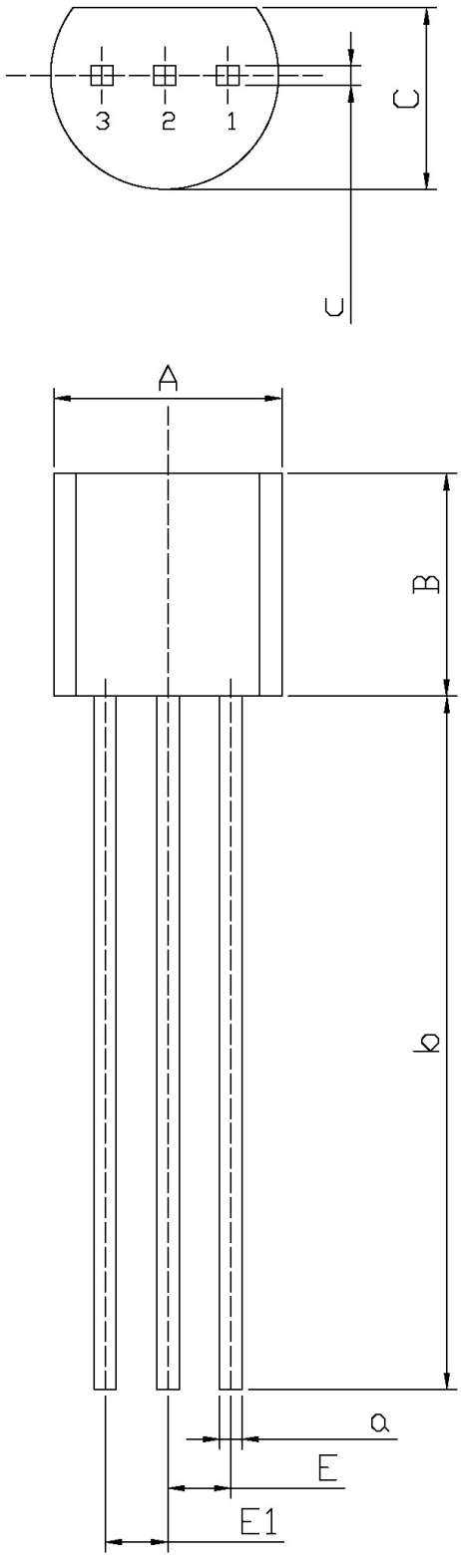






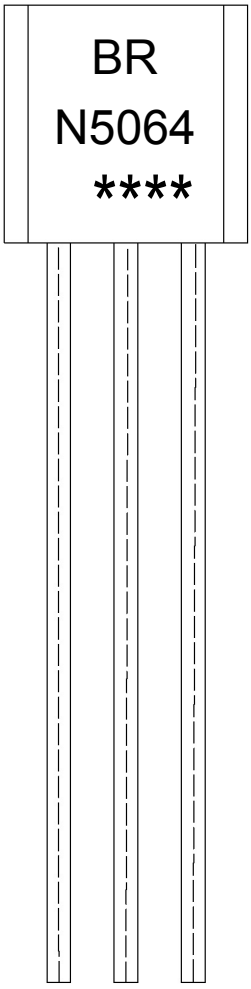
外形尺寸图 / Package Dimensions

TO-92 Unit: mm



Symbol	Dimensions In Millmeters	
	Min	Max
A	4.4	4.8
B	4.3	4.7
b	13	15
a	0.40	0.60
E	1.22	1.32
E1	1.22	1.32
C	3.4	3.8
c	0.30	0.50

印章说明 / Marking Instructions



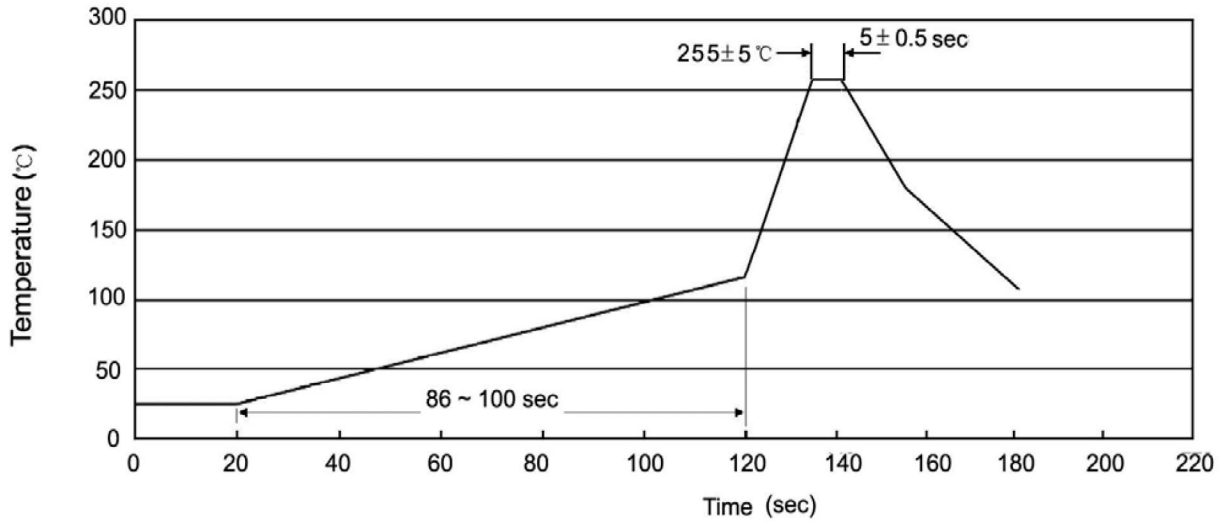
说明：

BR：	为公司代码
N5064：	为型号代码
****：	为生产批号代码，随生产批号变化。

Note:

BR:	Company Code.
N5064:	Product Type.
****:	Lot No. Code, code change with Lot No.

波峰焊温度曲线图(无铅) / Temperature Profile for Dip Soldering(Pb-Free)



说明：

1、预热温度 25～150℃，时间 60～90sec;

2、峰值温度 255±5℃，时间持续为 5±0.5sec;

3、焊接制程冷却速度为 2～10℃/sec.

Note:

1.Preheating:25~150℃, Time:60~90sec.

2.Peak Temp.:255±5℃, Duration:5±0.5sec.

3. Cooling Speed: 2~10℃/sec.

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

温度：270±5℃ 时间：10±1 sec. Temp.:270±5℃ Time:10±1 sec

包装规格 / Packaging SPEC.

散件包装 / BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
TO-92	1,000	10	10,000	5	50,000	135×190	237×172×102	560×245×195
	1,000	10	10,000	10	100,000	135×190	237×172×102	560×245×375

编带包装 / AMMO

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)	
	Units/tape 只/纸带	Tape/Inner Box 纸带/盒	Rows/Inner Box 纸带层/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Inner Box 盒	Outer Box 箱
TO-92	3,000	1	120	10	30,000	328×230×42	小箱 480×346×235， 大箱 547×407×268

使用说明 / Notices