

XL1225

Rev.E Mar.-2016

描述 / Descriptions

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

特征 / Features

低成本，高容量。

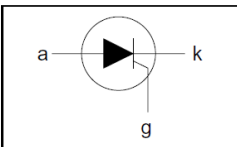
Intended for low cost high volume applications.

用途 / Applications

应用于高压控制电路。

Applied to high Voltage control circuit.

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.

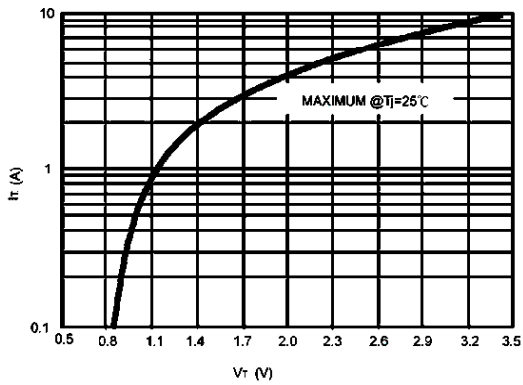
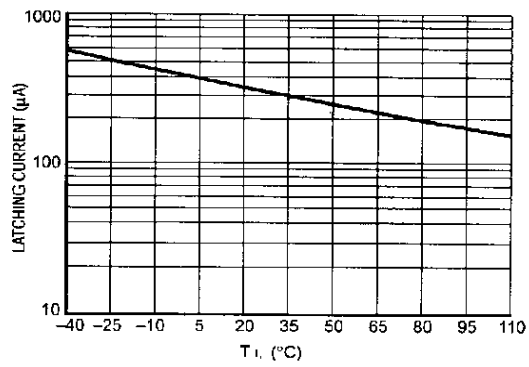
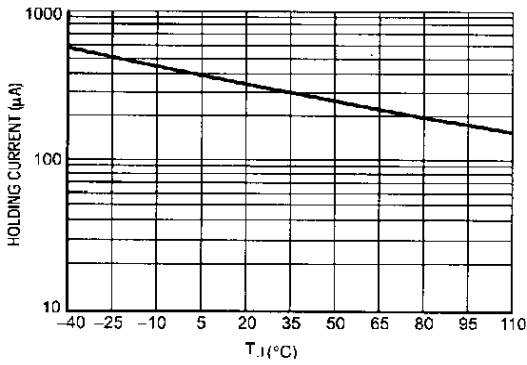
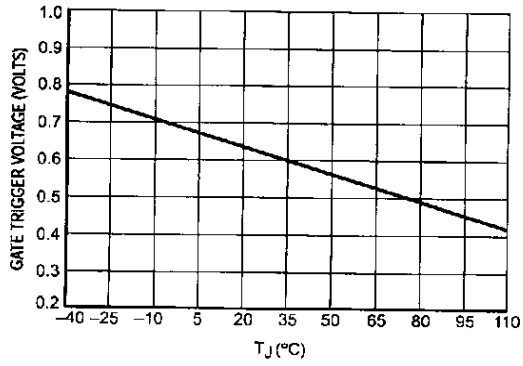
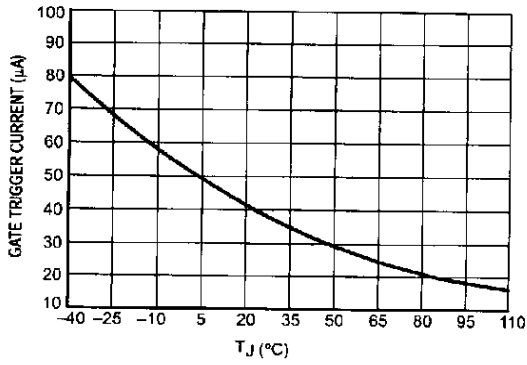
极限参数 / Absolute Maximum Ratings(Ta=25°C)

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}	$T_j=40$ to 125°C ($r_{gk}=1\text{k}\Omega$)	400	V
RMS on-state current	$I_{T(RMS)}$	$T_c=40^{\circ}\text{C}$	0.8	A
Average on-state current	$I_{T(AV)}$	Half cycle=180 $T_c=40^{\circ}\text{C}$	0.5	A
Peak Reverse Gate Voltage	V_{GRM}	$I_{GR}=10\mu\text{A}$	1.0	V
Peak gate current	I_{GM}	10 μs Max	0.1	A
Peak gate power	P_{GM}	20ms Max	150	mW
Junction Temperature	T_j		-40~125	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}		-40~125	$^{\circ}\text{C}$
Soldering Temperature	T_{SLD}	6mm from case10s Max	250	$^{\circ}\text{C}$

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
Repetitive peak off-state current	I_{DRM}	@ $V_{DRM}(R_{GK}=1\text{K}\Omega)$ $T_j=125^{\circ}\text{C}$			0.1	mA
Repetitive peak off-state current	I_{RRM}	@ $V_{DRM}(R_{GK}=1\text{K}\Omega)$ $T_j=25^{\circ}\text{C}$			1.0	μA
Repetitive peak on-state voltage	V_T	$A_T I_T=0.4\text{A}$			1.4	V
		$A_T I_T=0.8\text{A}$			2.2	
On state threshold voltage	$V_{T(TO)}$	$T_j=125^{\circ}\text{C}$			0.95	V
On state slops resistance	R_t	$T_j=125^{\circ}\text{C}$			600	m
Gate trigger current	I_{GT}	$V_D=7.0\text{V}$			200	μA
Gate trigger voltage	V_{GT}	$V_D=7.0\text{V}$			0.8	V
Holding current	I_H	$R_{GK}=1\text{K}\Omega$			5	mA
Latching current	I_L	$R_{GK}=1\text{K}\Omega$			6	mA

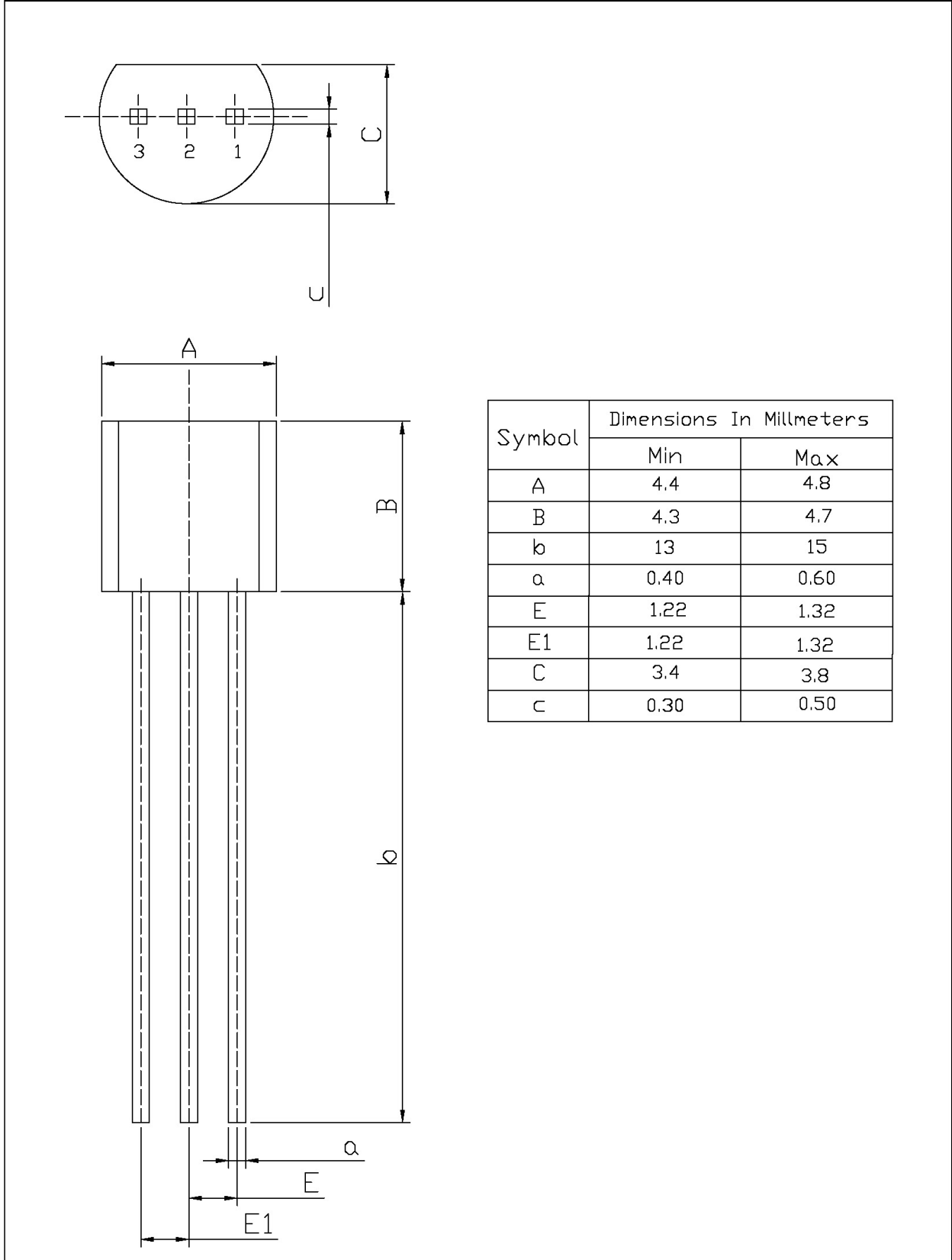
电参数曲线图 / Electrical Characteristic Curve



外形尺寸图 / Package Dimensions

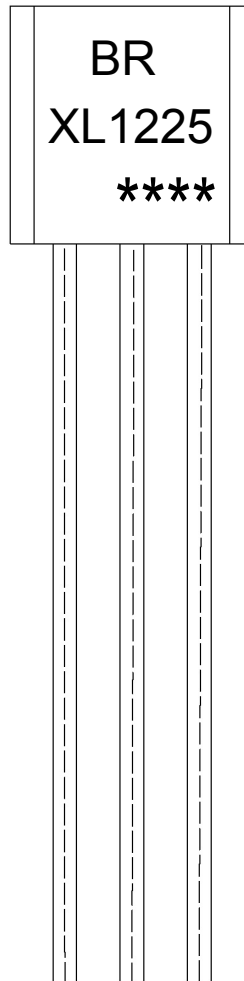
TO-92

Unit: mm



Symbol	Dimensions In Millimeters	
	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

XL1225： 为产品型号

****： 为生产批号代码，随生产批号变化。

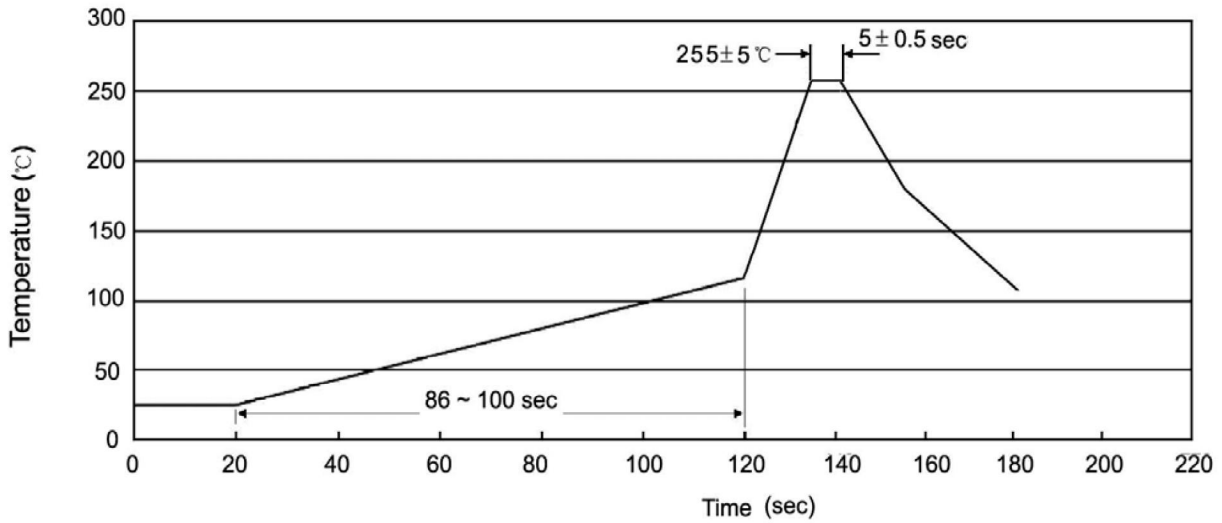
Note:

BR: Company Code.

XL1225: 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°C，时间 60 ~ 90sec;
- 2、峰值温度 255±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2 ~ 10°C/sec.

Note:

- 1.Preheating:25~150°C, Time:60~90sec.
- 2.Peak Temp.:255±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

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

温度：270±5°C 时间：10±1 sec. Temp.:270±5°C 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