

# Z00607MA

Rev.E Mar.-2016

## 描述 / Descriptions

TO-92 塑封封装双向可控硅。Triac in a TO-92 Plastic Package.

## 特征 / Features

低控制极触发电流。

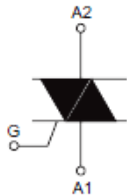
Low gate triggering current.

## 用途 / Applications

用于低功率交流转换。

For low power AC switching applications.

## 内部等效电路 / Equivalent Circuit



## 引脚排列 / Pinning



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

## 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
Non-repetitive peak on-state current	$I_{TSM}$	F=50Hz t=20ms	9	A
		F=60Hz t=16.7ms	10.0	A
$I_t^2$ for fusing	$I_T^2$	Tp=10ms	0.32	A <sup>2</sup> S
Repetitive rate of rise of on-state current after triggering $I_{TM}=1A, I_G=20mA,$ $dI_G/dt=0.2A/\mu s$	$dI_T/dt$	T2+ G+	50	A/ $\mu s$
		T2+ G-	50	
		T2- G-	50	
		T2- G+	10	
Peak gate current	$I_{GM}$	tp=20 $\mu s$ $T_j=110^\circ C$	1.0	A
Peak gate power	$P_{G(AV)}$	$T_j=110^\circ C$	0.1	W
RMS on-state current	$I_{T(RMS)}$		0.8	A
	$I_{T(RMS)}$	$T_j=50^\circ C$	1.0	A
Repetitive peak off-state voltages	$V_{DRM}$ $V_{RRM}$		600	V
Junction Temperature	$T_j$		-40~125	$^\circ C$
Storage Temperature Range	$T_{stg}$		-40~150	$^\circ C$

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

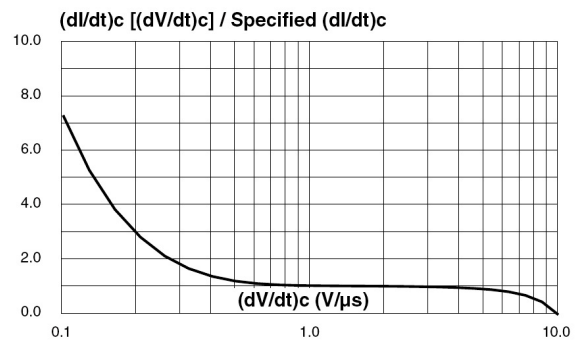
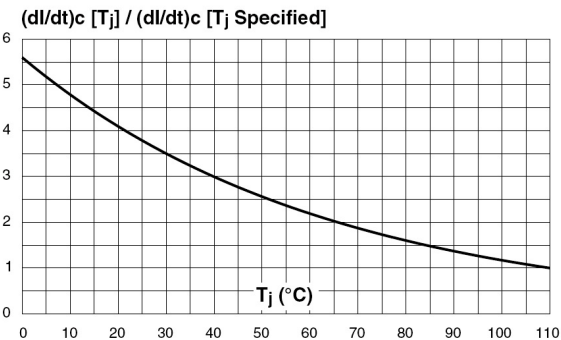
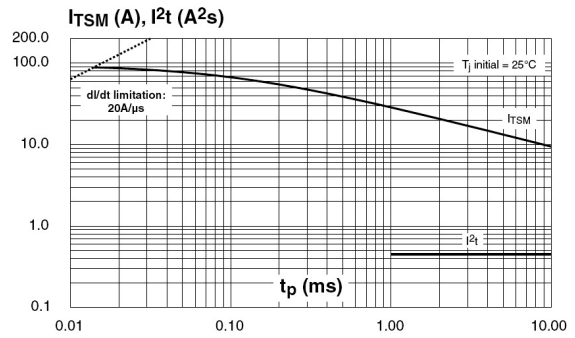
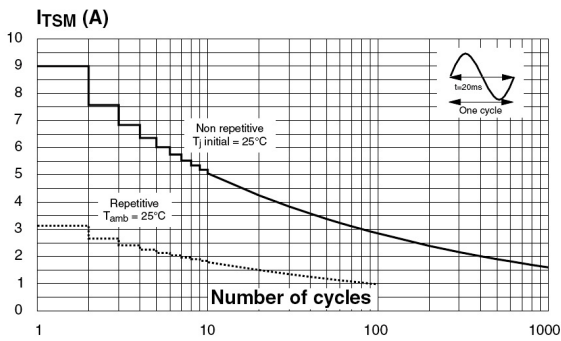
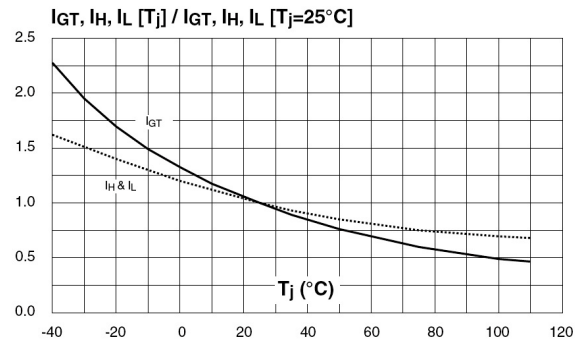
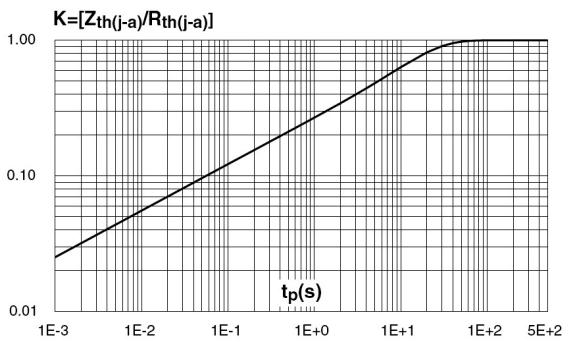
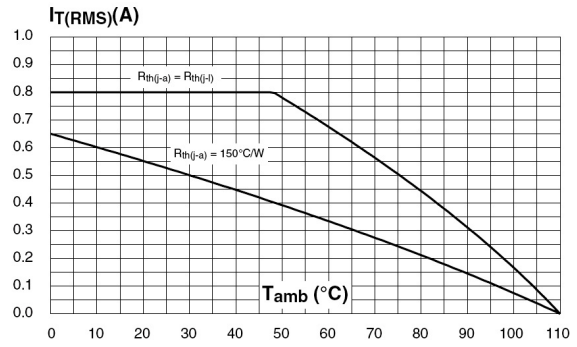
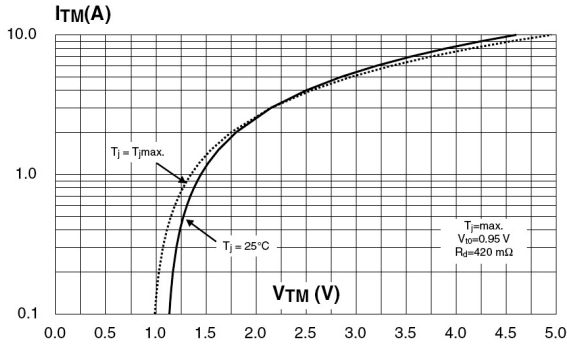
参数 Parameter	符号 Symbol	测试条件 Test Conditions	信号区 Quadrant	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Gate trigger current	$I_{GT}$	$V_D=12V$ $R_L=140\Omega$	I-II-III			5.0	mA
			IV			7.0	
Gate trigger voltage	$V_{GT}$		ALL			1.5	V
On-state voltage	$V_{GD}$	$V_D=V_{DRM}$ $R_L=3.3K\Omega$ $T_j=110^\circ C$	ALL	0.2			V
Holding current	$I_{H(1)}$	$I_T=200mA$				5.0	mA
Latching current	$I_L$	$I_G=1.2I_{GT}$	I-III-IV			10	mA
			II			20	mA
Critical rate of rise of off-state voltage	$dV/dt_{(1)}$	$V_D=67\%V_{DRM}$ gate open $T_j=110^\circ C$		10			V/ $\mu s$
	$(dV/dt)_{c(1)}$	$(dI/dt)_c=0.35A/ms$ $T_j=110^\circ C$		1.5			V/ $\mu s$

Note1: for either polarity of electrode A<sub>2</sub> voltage with reference to electrode A<sub>1</sub>

**静态参数 / Static characteristics**

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 voltage	$V_{TM}$	$I_{TM}=1.1A$ $t_p=380\mu s$ $T_j=25^\circ C$			1.5	V
Repetitive peak off-state current	$I_{DRM}$ $I_{RRM}$	$V_{DRM}=V_{RRM}$			10	$\mu A$
					0.1	mA

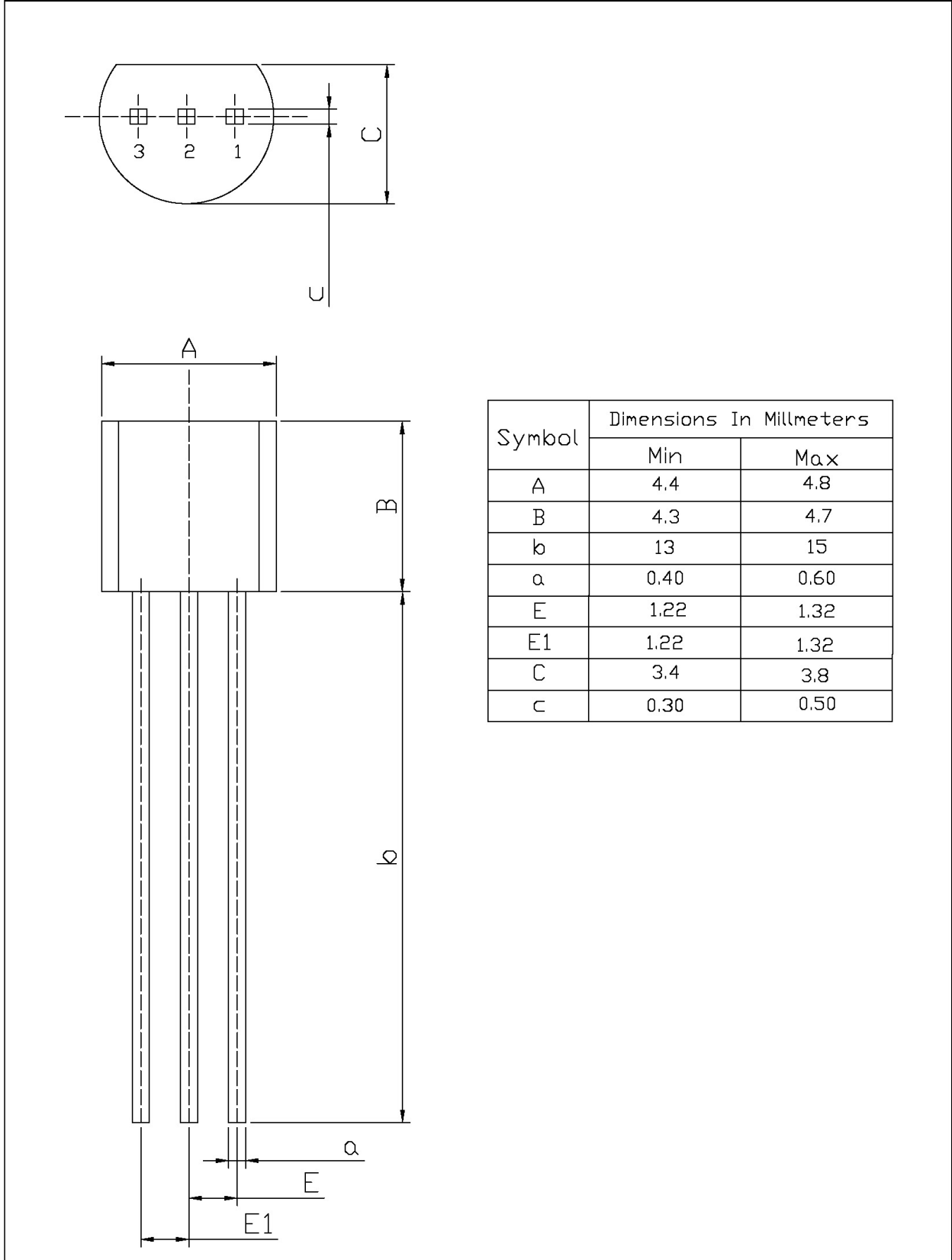
电参数曲线图 / Electrical Characteristic Curve



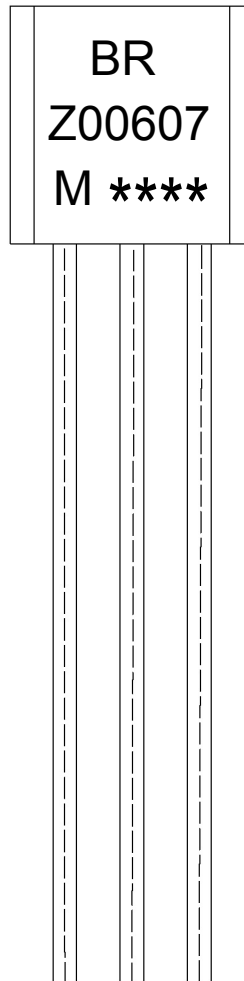
外形尺寸图 / Package Dimensions

TO-92

Unit: mm



印章说明 / Marking Instructions



说明：

BR： 为公司代码

Z00607： 为产品型号

M： 为电压代码

\*\*\*\*： 为生产批号代码，随生产批号变化。

Note:

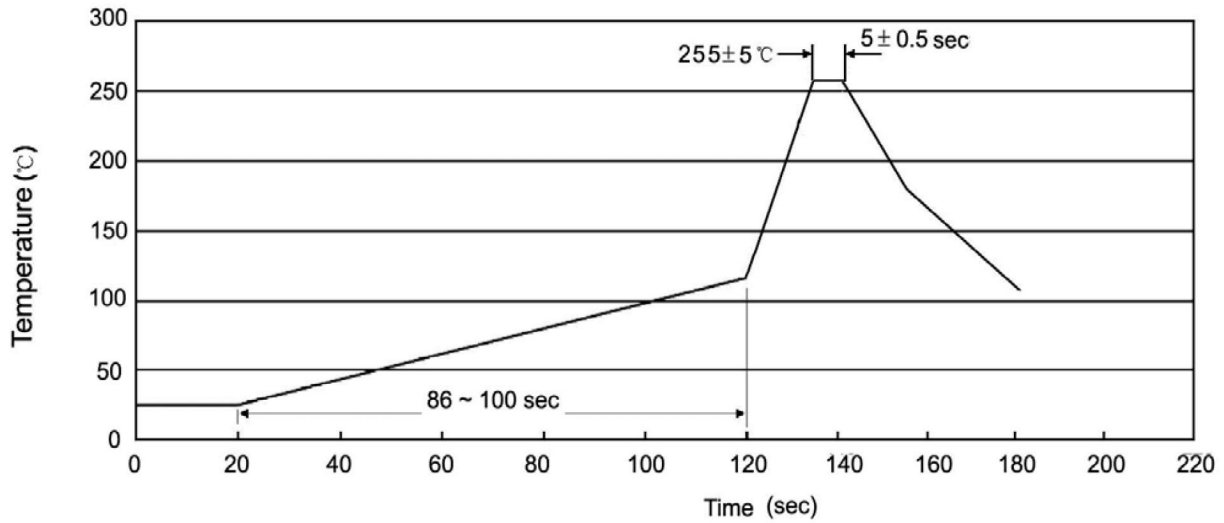
BR: Company Code.

Z00607: Product Type.

M: Voltage Code.

\*\*\*\*: 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**