



3CT06B

主要参数 MAIN CHARACTERISTICS

$I_{T(AV)}$	0.63 A
V_{DRM}/V_{RRM}	600 V
I_{GT}	10-140 μ A

用途

- 半交流开关
- 相位控制

APPLICATIONS

- Half AC switching
- Phase control

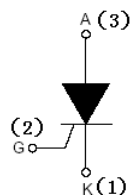
产品特性

- 玻璃钝化芯片，高可靠性和一致性
- 低通态电流和高浪涌电流能力
- 环保 RoHS 产品

FEATURES

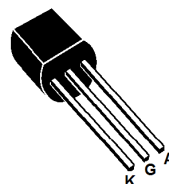
- Glass-passivated mesa chip for reliability and uniform
- Low on-state voltage and High I_{TSM}
- RoHS products

封装 Package

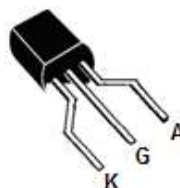


序号 Pin	引线名称 Description
1	阴极 K
2	门极 G
3	阳极 A

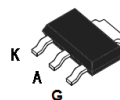
TO-92



TO-92-F1



SOT-223



订货信息 ORDER MESSAGE

订货型号 Order codes	印记 Marking	无卤素 Halogen Free	封装 Package	包装 Packaging
3CT06B-O-T-N-C	3CT06B	含卤	TO-92	袋装 Bag
3CT06B-O-T-B-C	3CT06B	含卤	TO-92-F1	袋装 Bag
3CT06B-O-N-N-A	3CT06B	含卤	SOT-223	编带 Brede



绝对最大额定值 ABSOLUTE RATINGS ($T_c=25^{\circ}\text{C}$)

项 目 Parameter	符 号 Symbol	数 值 Value	单 位 Unit
断态重复峰值电压 Repetitive peak off-state voltage	V_{DRM}	600	V
反向重复峰值电压 Repetitive peak reverse voltage	V_{RRM}	600	V
通态平均电流 Average on-state current	$I_{\text{T(AV)}}$	0.63	A
通态方均根电流 On-state RMS current (half sine wave)	$I_{\text{T(RMS)}}$	1.0	A
非重复浪涌峰值通态电流 Non-repetitive surge peak on-state current (half sine wave, $t=10\text{ms}$)	I_{TSM}	8	A
峰值门极电流 Peak gate current	I_{GM}	1	A
门极峰值电压 Peak gate voltage	V_{GM}	5	V
反向门极峰值电压 Peak reverses gate voltage	V_{RGM}	5	V
门极峰值功率 Peak gate power	P_{GM}	2	W
平均门极功率 Average gate power(over any 20ms period)	$P_{\text{G(AV)}}$	0.1	W
存储温度 Storage temperature	T_{stg}	-40~150	$^{\circ}\text{C}$
操作结温 Operation junction temperature	T_{VJ}	125	$^{\circ}\text{C}$

电特性 ELECTRICAL CHARACTERISTIC ($T_c=25^{\circ}\text{C}$ unless otherwise stated)

项 目 Parameter	符号 Symbol	测试条件 Tests conditions	最小 min	典型 typ	最大 max	单位 Unit
断态峰值重复电流 Peak Repetitive Blocking Current	I_{DRM}	$V_{\text{DM}}=V_{\text{DRM}}$, $T_j=125^{\circ}\text{C}$, $R_{\text{GK}}=1\text{K}\Omega$	-	-	0.1	mA
反向峰值重复电流 Peak Repetitive Reverse Current	I_{RRM}	$V_{\text{RM}}=V_{\text{RRM}}$, $T_j=125^{\circ}\text{C}$, $R_{\text{GK}}=1\text{K}\Omega$	-	-	0.1	mA
峰值通态电压 Peak on-state voltage	V_{TM}	$I_{\text{TM}}=2\text{A}$	-	—	1.8	V
门极触发电流 Gate trigger current	I_{GT}	$V_{\text{DM}}=12\text{V}$, $I_{\text{T}}=0.1\text{A}$	10	-	140	μA
门极触发电压 Gate trigger voltage	V_{GT}	$V_{\text{DM}}=12\text{V}$, $I_{\text{T}}=0.1\text{A}$	-	0.65	0.8	V
维持电流 Holding current	I_{H}	$V_{\text{DM}}=12\text{V}$, $I_{\text{GT}}=1\text{mA}$	-	-	5	mA

动态特性 DYNAMIC CHARACTERISTICS ($T_c=25^{\circ}\text{C}$ unless otherwise stated)

项 目 Parameter	符号 Symbol	测试条件 Tests conditions	最小 min	典型 typ	最大 max	单位 Unit
断态临界电压上升率 Critical rate of rise of off-state voltage	dV/dt	$V_{\text{DM}}=67\% V_{\text{DRM(MAX)}}$, $T_j=125^{\circ}\text{C}$, $R_{\text{GK}}=1\text{K}\Omega$	10	-	-	$\text{V}/\mu\text{s}$

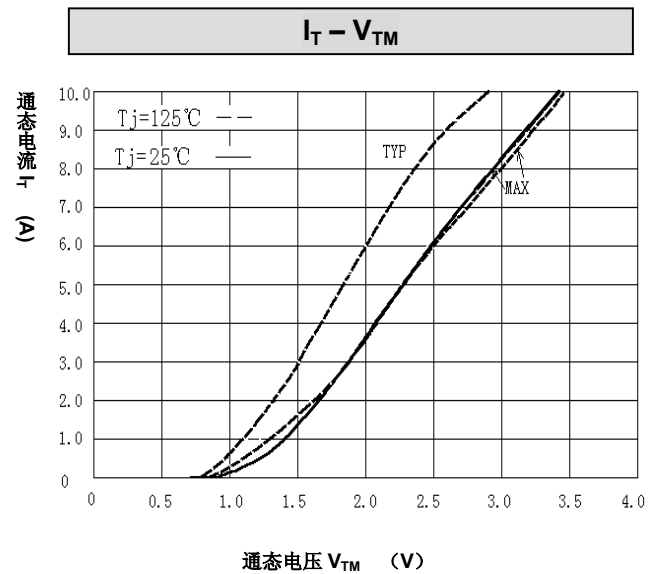
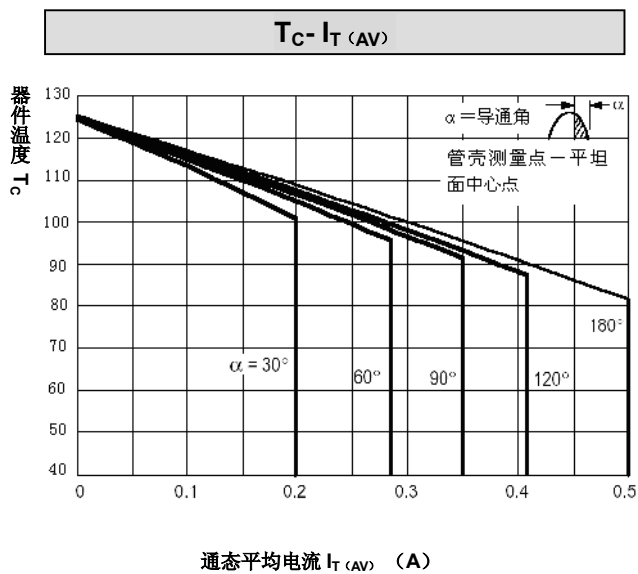




热特性 THERMAL CHARACTERISTIC

项 目 Parameter		符 号 Symbol	值 value	单位 Unit
结到引线的热阻 Thermal resistance junction to lead	TO-92	$R_{th(j-l)}$	60 max	$^{\circ}\text{C}/\text{W}$
结到表面的热阻 Thermal resistance junction to tab	SOT-223	$R_{th(j-t)}$	30 max	
结到环境的热阻	--	$R_{th(j-a)}$	150 typ	
Thermal resistance junction to ambient	$S=5\text{cm}^2$		60 typ	

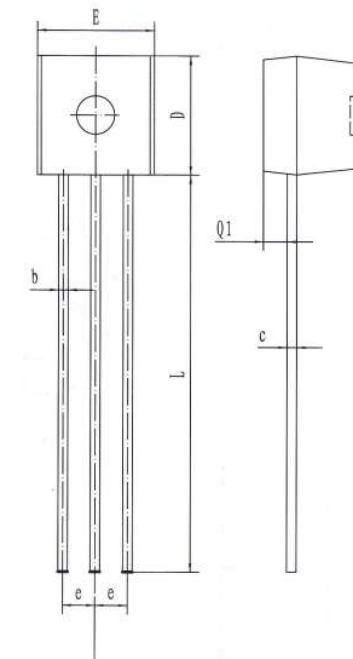
特征曲线 ELECTRICAL CHARACTERISTICS (curves)



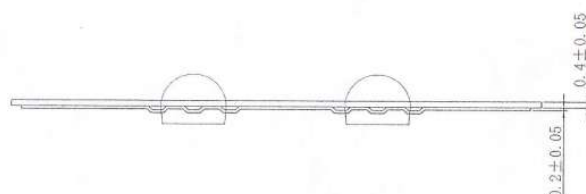
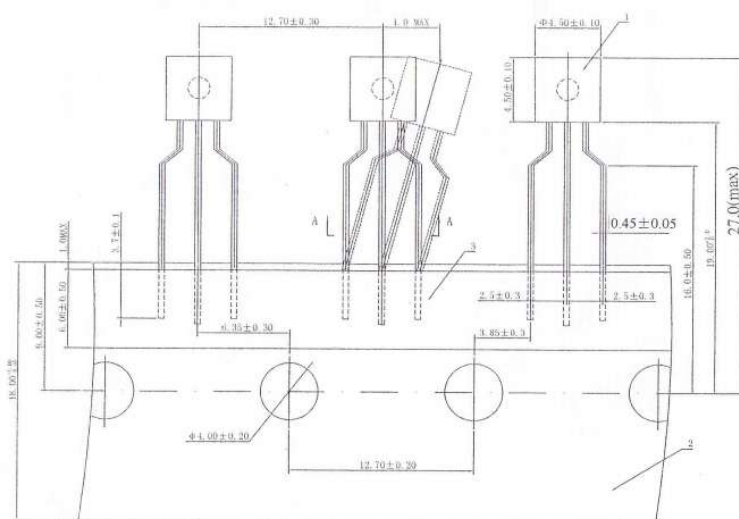
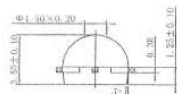
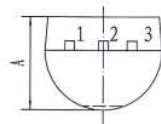
外形尺寸 PACKAGE MECHANICAL DATA

TO-92

单位 Unit : mm



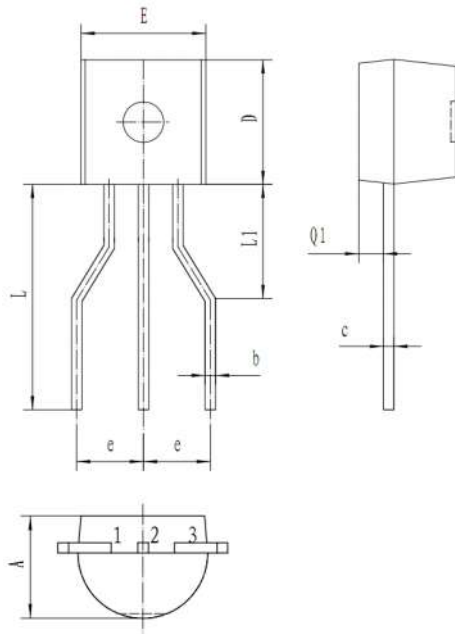
A	3.30-3.90
b	0.35-0.55
c	0.31-0.51
D	4.30-4.90
E	4.30-4.90
e	1.17-1.37
L	12.50-15.50
Q1	0.85-1.00





外形尺寸 PACKAGE MECHANICAL DATA
TO-92-F1

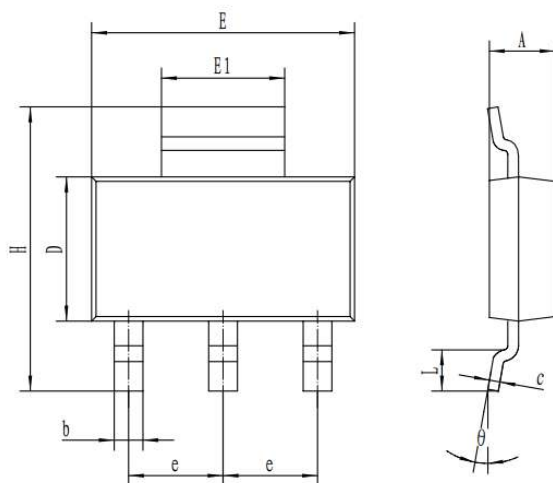
单位 Unit : mm



A	3.30-3.90
b	0.35-0.55
c	0.31-0.51
D	4.30-4.90
E	4.30-4.90
e	1.17-1.37
L	5.00-6.00
L1	2.70-3.30
Q1	0.74-0.89

外形尺寸 PACKAGE MECHANICAL DATA
SOT-223

单位 Unit : mm



A	1.50-1.70
A1	0.02-0.10
b	0.60-0.80
c	0.24-0.31
D	3.30-3.70
E	6.30-6.50
E1	2.90-3.10
e	2.30 type
H	6.75-7.05
L	0.80-1.20
θ	0° -10°



**注意事项**

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附录（Appendix）：修订记录（Revision History）

日期 Date	旧版本 Last Rev.	新版本 New Rev.	修订内容 Description of Changes
2009-11-3	200901C	200911D	中英文格式改版，修改电话号码
2015-9-15	200911D	201509E	增加产品外形
2015-10-23	201509E	201510F	修正外形尺寸、排版

