



# 3DG5551

## 主要参数 MAIN CHARACTERISTICS

$I_C$	0.6A
$V_{CEO}$	160V
$P_C$ (TO-92)	0.625W
$P_C$ (SOT-23)	0.350W

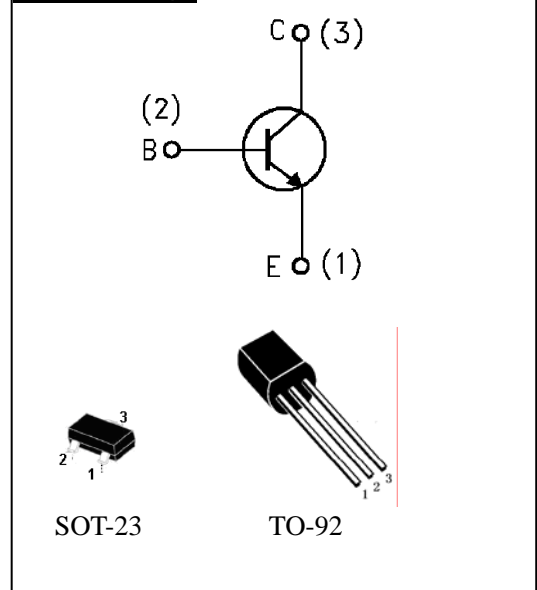
### 用途

- 高频开关电源
- 高频功率变换
- 一般功率放大电路

### APPLICATIONS

- High frequency switching power supply
- High frequency power transform
- Commonly power amplifier circuit

### 封装 Package



### 产品特性

- 硅外延
- 高开关速度
- 与 3CG5401 互补
- 环保 (RoHS) 产品

### FEATURES

- Epitaxial silicon
- High switching speed
- Complementary to 3CG5401
- RoHS product

## 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
3DG5551-O-T-N-C	5551	否 NO	TO-92	袋装 Bag
3DG5551-O-T-N-A	5551	否 NO	TO-92	编带 Brede
3DG5551-O-N1-N-A	G	否 NO	SOT-23	编带 Brede



**绝对最大额定值 ABSOLUTE RATINGS (T<sub>C</sub>=25℃)**

项 目 Parameter	符 号 Symbol	数 值 Value	单 位 Unit
集电极—基极直流电压 Collector- Base Voltage ( I <sub>E</sub> =0)	V <sub>CBO</sub>	180	V
集电极—发射极直流电压 Collector- Emitter Voltage ( I <sub>B</sub> =0)	V <sub>CEO</sub>	160	V
发射极—基极直流电压 Emitter-Base Voltage ( I <sub>C</sub> =0)	V <sub>EBO</sub>	6	V
最大集电极直流电流 Collector Current (DC)	I <sub>C</sub>	0.6	A
最大集电极耗散功率 Total Dissipation (TO-92)	P <sub>C</sub>	0.625	W
最大集电极耗散功率 Total Dissipation (SOT-23)	P <sub>C</sub>	0.350	W
最高结温 Junction Temperature	T <sub>j</sub>	150	℃
贮存温度 Storage Temperature	T <sub>stg</sub>	-55~+150	℃

**电特性 EIECTRICAL CHARACTERISTIC**

项 目 Parameter	测试条件 Tests conditions	最小值 Value(min)	典型值 Value(typ)	最大值 Value(max)	单 位 Unit
V(BR) <sub>CBO</sub>	I <sub>C</sub> =100uA, I <sub>E</sub> =0	180	-	-	V
V(BR) <sub>CEO</sub>	I <sub>C</sub> =1mA, I <sub>B</sub> =0	160	-	-	V
V(BR) <sub>EBO</sub>	I <sub>E</sub> =100uA, I <sub>C</sub> =0	6	-	-	V
I <sub>CBO</sub>	V <sub>CB</sub> =120V, I <sub>E</sub> =0	-	-	50	nA
I <sub>EBO</sub>	V <sub>EB</sub> =4V, I <sub>C</sub> =0	-	-	50	nA
Hfe(1)	V <sub>CE</sub> =5V, I <sub>C</sub> =1mA	80	-	-	
Hfe(2)	V <sub>CE</sub> =5V, I <sub>C</sub> =10mA	80	160	250	
Hfe(3)	V <sub>CE</sub> =5V, I <sub>C</sub> =50mA	80	-	-	
V <sub>CE(sat)</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =1mA	-	-	0.15	V
	I <sub>C</sub> =50mA, I <sub>B</sub> =5mA	-	-	0.2	V
V <sub>BE(sat)</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =1mA	-	-	1.0	V
	I <sub>C</sub> =50mA, I <sub>B</sub> =5mA	-	-	1.0	V
f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =50mA	100	-	-	MHz

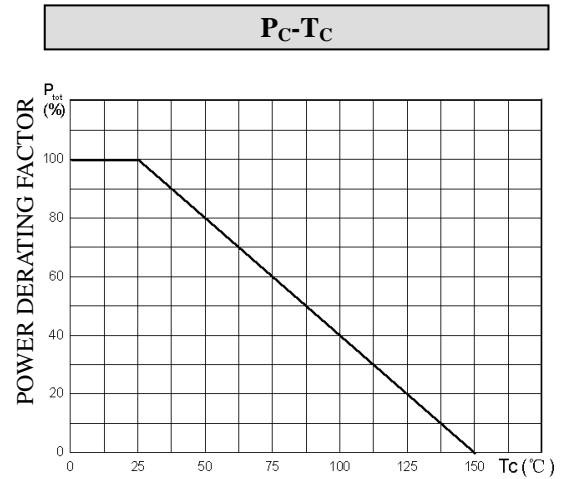
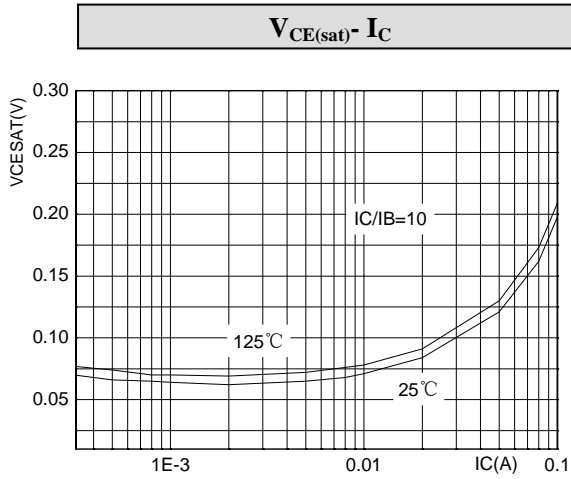
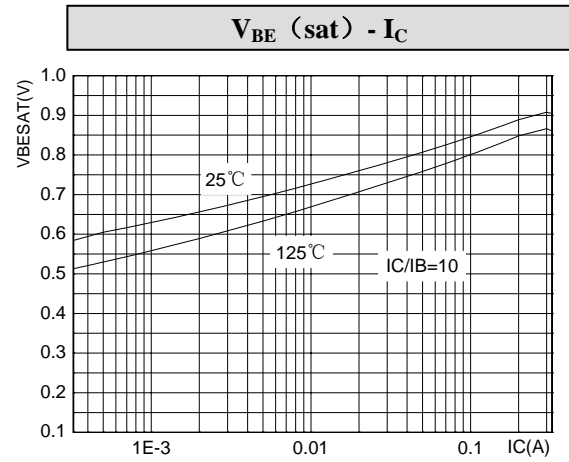
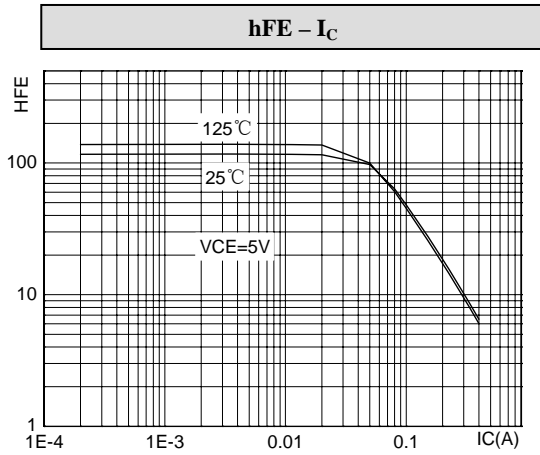
**热特性 THERMAL CHARACTERISTIC**

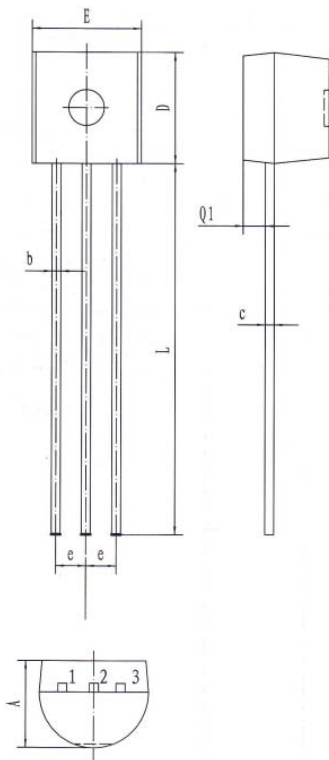
项 目 Parameter	符 号 Symbol	最小值 Value(min)	最大值 Value(max)	单 位 Unit
结到环境的热阻 TO-92 Thermal Resistance Junction Ambient TO-92	R <sub>th(j-a)</sub>	-	125	℃/W
结到环境的热阻 SOT-23 Thermal Resistance Junction Ambient SOT-23	R <sub>th(j-a)</sub>	-	357	℃/W



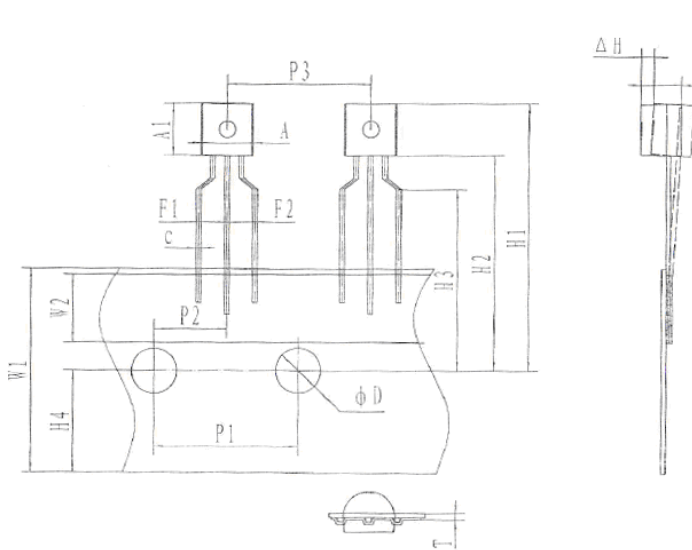


特征曲线 ELECTRICAL CHARACTERISTICS (curves)



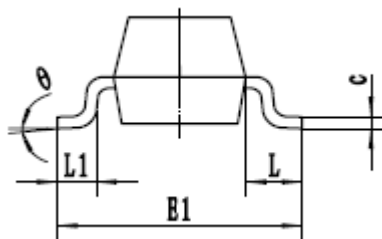
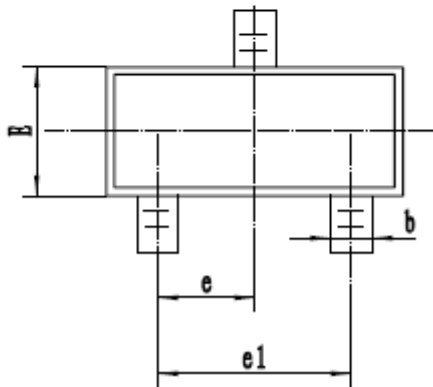
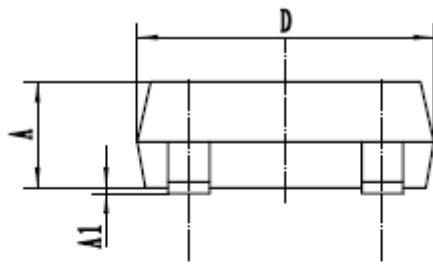


符号 Symbol	尺寸 (mm) Size (mm)
A	3.30-3.90
b	0.35-0.55
c	0.31-0.51
D	4.30-4.90
E	4.30-4.90
e	1.17-1.37
L	12.50-15.50
Q1	0.85-1.00



符号 Symbol	尺寸 (mm) Size (mm)
A	4.30-4.90
A1	4.30-4.90
A2	3.30-3.90
c	TYP 0.45
F1/F2	2.20-2.80
W1	17.5-18.5
W2	5.50-6.50
H1	22.0-27.0
H2	18.0-20.0
H3	15.0-17.0
H4	8.50-9.50
P1	12.5-12.9
P2	6.00-6.70
P3	12.5-12.9
T	0.40-0.45
φ D	3.80-4.20
△H	0.00-1.00





SYMBOL	mm	
	MIN	MAX
A	0.85	1.20
A1	0.00	0.15
b	0.25	0.60
c	0.075	0.20
D	2.75	3.05
E	1.15	1.45
E1	2.20	2.60
e	0.950TYP	
e1	1.75	2.05
L	0.55REF	
L1	0.15	0.55
$\theta$	0°	10°



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3. 在电路设计时请不要超过器件的绝对最大额定值，否则会影响整机的可靠性。
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3. Please do not exceed the absolute maximum ratings of the device when circuit designing.
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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
2015-9-18		201509A	新版本

