

# 2SC2246

## 主要参数 MAIN CHARACTERISTICS

$I_C$	15A
$V_{CE0}$	500V
$P_C(TO-3PL/3PLT)$	120W

### 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

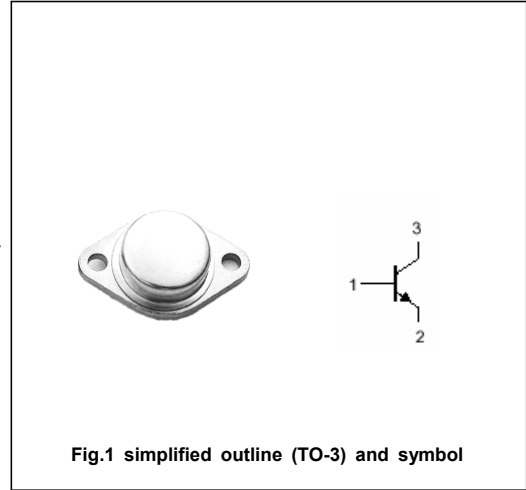


Fig.1 simplified outline (TO-3) and symbol

### 产品特性

- 高耐压
- 高电流容量
- 高开关速度
- 高可靠性
- 环保 (RoHS) 产品

### FEATURES

- High breakdown voltage
- High current capability
- High switching speed
- High reliability
- RoHS product

## 绝对最大额定值 ABSOLUTE RATINGS (T<sub>c</sub>=25°C)

项 目 Parameter	符 号 Symbol	数 值 Value	单 位 Unit
集电极—发射极直流电压 Collector- Emitter Voltage (V <sub>BE</sub> =0)	V <sub>CES</sub>	980	V
集电极—发射极直流电压 Collector- Emitter Voltage (I <sub>B</sub> =0)	V <sub>CEO</sub>	500	V
发射极—基极直流电压 Emitter-Base Voltage	V <sub>EBO</sub>	9	V
最大集电极直流电流 Collector Current (DC)	I <sub>C</sub>	15	A
最大集电极脉冲电流 Collector Current (pulse)	I <sub>CP</sub>	30	A
最大基极直流电流 Base Current (DC)	I <sub>B</sub>	7	A
最大基极脉冲电流 Base Current (pulse)	I <sub>BP</sub>	14	A
最大集电极耗散功率 Total Dissipation	P <sub>C</sub>	120	W
最高结温 Junction Temperature	T <sub>j</sub>	150	°C
贮存温度 Storage Temperature	T <sub>stg</sub>	-55~+150	°C

注：pulse电流宽度为小于5ms的非重复单脉冲。 Pulse Test: Pulse Width = 5.0 ms, Duty Cycle < 10%.

## 电特性 EIECTRICAL CHARACTERISTIC

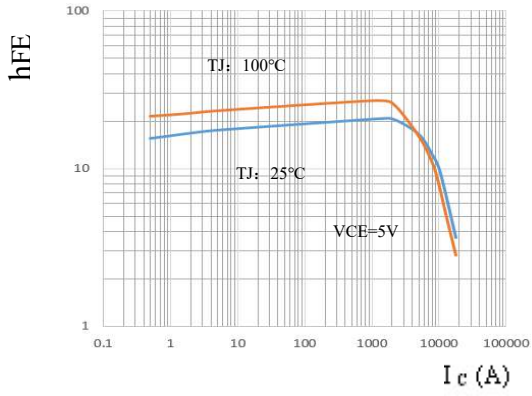
项 目 Parameter	测试条件 Tests conditions	最小值 Value(min)	典型值 Value(typ)	最大值 Value(max)	单 位 Unit
V(BR) <sub>CEO</sub>	I <sub>C</sub> =5mA, I <sub>B</sub> =0	500	-	-	V
V(BR) <sub>CBO</sub>	I <sub>C</sub> =1mA, I <sub>E</sub> =0	980	-	-	V
V(BR) <sub>EBO</sub>	I <sub>E</sub> =1mA, I <sub>C</sub> =0	9	-	-	V
I <sub>CBO</sub>	V <sub>CB</sub> =920V, I <sub>E</sub> =0	-	-	50	μA
I <sub>CEO</sub>	V <sub>CE</sub> =480V, I <sub>B</sub> =0	-	-	100	μA
I <sub>EBO</sub>	V <sub>EB</sub> =8V, I <sub>C</sub> =0	-	-	10	μA
H <sub>fe</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =1A	15	-	30	
ts	I <sub>C</sub> =0.5A	2.0		6.0	μS
f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =0.5A	4	-	-	MHz

## 热特性 THERMAL CHARACTERISTIC

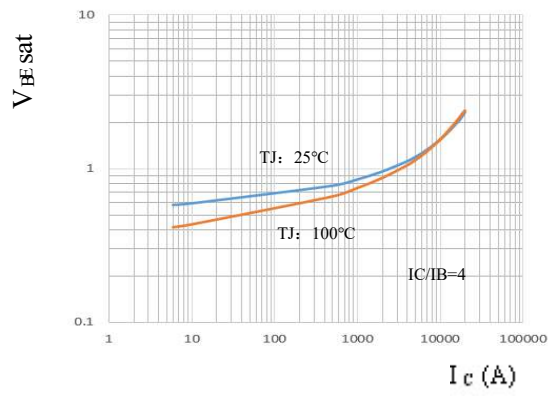
项 目 Parameter	符 号 Symbol	最小值 Value(min)	最大值 Value(max)	单 位 Unit
结到管壳的热阻 TO-3PL/3PLT Thermal Resistance Junction Case TO-3PL/3PLT	R <sub>th(j-c)</sub>	-	1.04	°C/W

# 特征曲线 ELECTRICAL CHARACTERISTICS (curves)

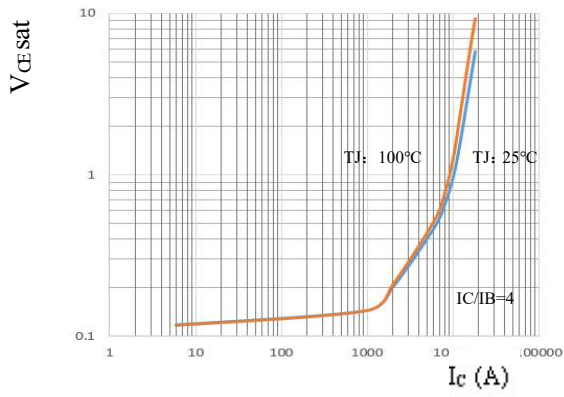
**hFE - I<sub>C</sub>**



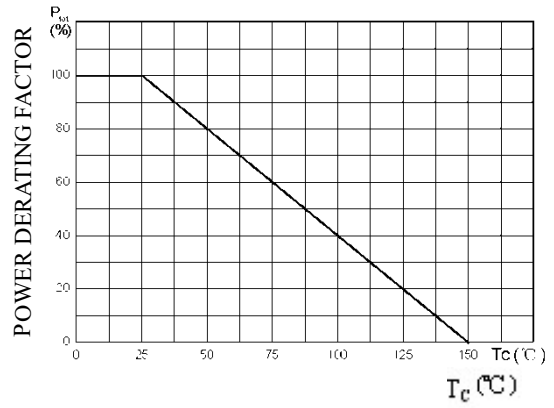
**V<sub>BE (sat)</sub> - I<sub>C</sub>**



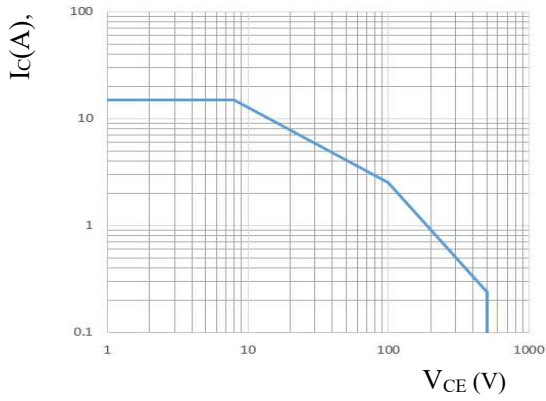
**V<sub>CE(sat)</sub> - I<sub>C</sub>**



**P<sub>C</sub> - T<sub>C</sub>**



**SOA**



PACKAGE OUTLINE

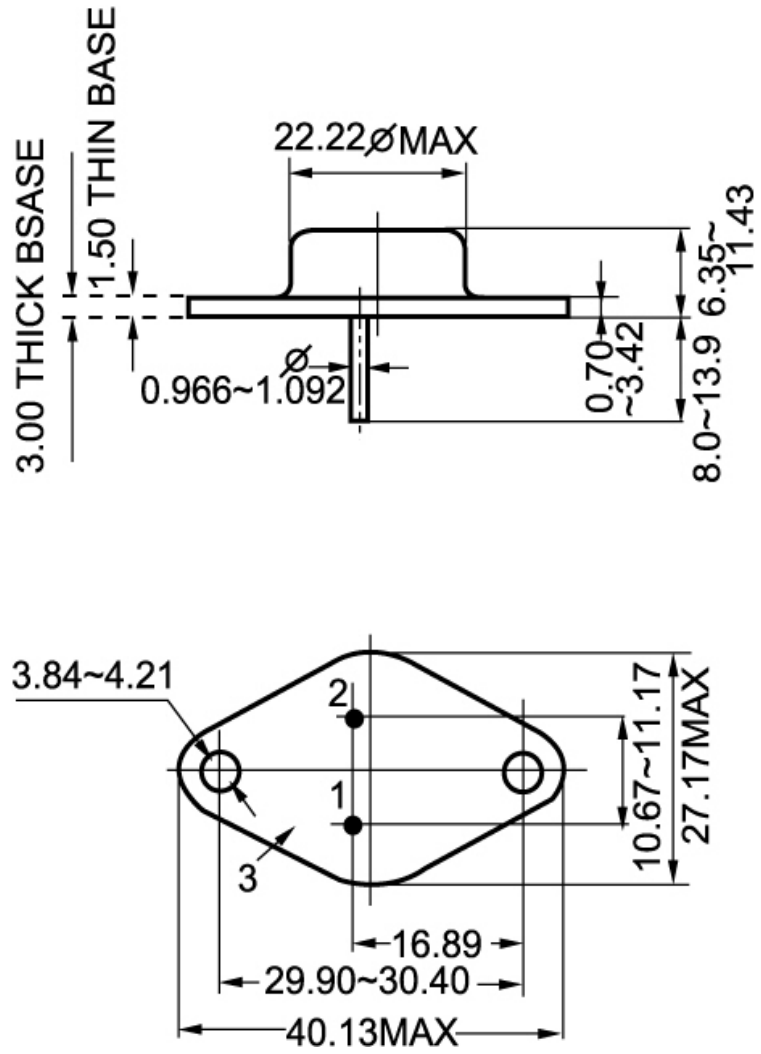


Fig.2 Outline dimensions