



**晶体管**  
**TRANSISTOR**  
**KSP42A**

**主要参数 MAIN CHARACTERISTICS**

I <sub>c</sub>	500mA
V <sub>CEO</sub>	300V
P <sub>c</sub>	625mW

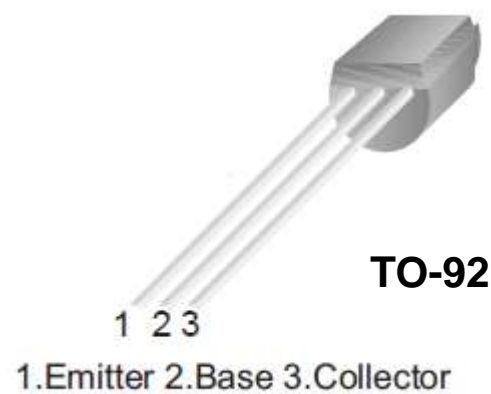
**产品特性 FEATURES**

硅外延	Epitaxial silicon
高开关速度	High switching speed
与 KSP92A 互补	Complementary to KSP92A
RoHS 产品	RoHS product

**用途 APPLICATIONS**

高频开关电源	High frequency switch power supply
一般功率放大电路	Commonly power amplifier circuit
高频功率变换	High frequency power transform

**封装形式 Package**



**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—基极直流电压 Collector- Base Voltage ( I <sub>E</sub> =0 )	V <sub>CB0</sub>	300	V
集电极—发射极直流电压 Collector- Emitter Voltage ( I <sub>B</sub> =0 )	V <sub>CE0</sub>	300	V
发射极—基极直流电压 Emitter-Base Voltage ( I <sub>C</sub> =0 )	V <sub>EB0</sub>	6	V
最大集电极直流电流 Collector Current ( DC )	I <sub>c</sub>	500	mA
最大集电极耗散功率 Total Dissipation ( TO-92 )	P <sub>c</sub>	625	mW
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

## 电特性 ELECTRICAL CHARACTERISTICS

项目 Parameter	测试条件 Tests conditions	最小值 (min)	典型值 (typ)	最大值 (max)	单位 Unit
V(BR) <sub>CBO</sub>	I <sub>C</sub> =100μA, I <sub>E</sub> =0	300	-	-	V
V(BR) <sub>CEO</sub>	I <sub>C</sub> =1.0mA, I <sub>B</sub> =0	300	-	-	V
V(BR) <sub>EBO</sub>	I <sub>E</sub> =100μA, I <sub>C</sub> =0	6	-	-	V
I <sub>CBO</sub>	V <sub>CB</sub> =200V, I <sub>E</sub> =0	-	-	0.1	μA
I <sub>EBO</sub>	V <sub>EB</sub> =6V, I <sub>C</sub> =0	-	-	0.1	μA
I <sub>CEO</sub>	V <sub>CE</sub> =300V, I <sub>B</sub> =0	-	-	5	μA
h <sub>FE</sub> (1)	V <sub>CE</sub> =10V, I <sub>C</sub> =10mA	100	-	200	-
h <sub>FE</sub> (2)	V <sub>CE</sub> =10V, I <sub>C</sub> =30mA	40	-	-	-
V <sub>CE(sat)</sub>	I <sub>C</sub> =20mA, I <sub>B</sub> =2.0mA	-	-	0.5	V
V <sub>BE(sat)</sub>	I <sub>C</sub> =20mA, I <sub>B</sub> =2.0mA	-	-	0.9	V

## 典型特性曲线 Electrical Characteristics

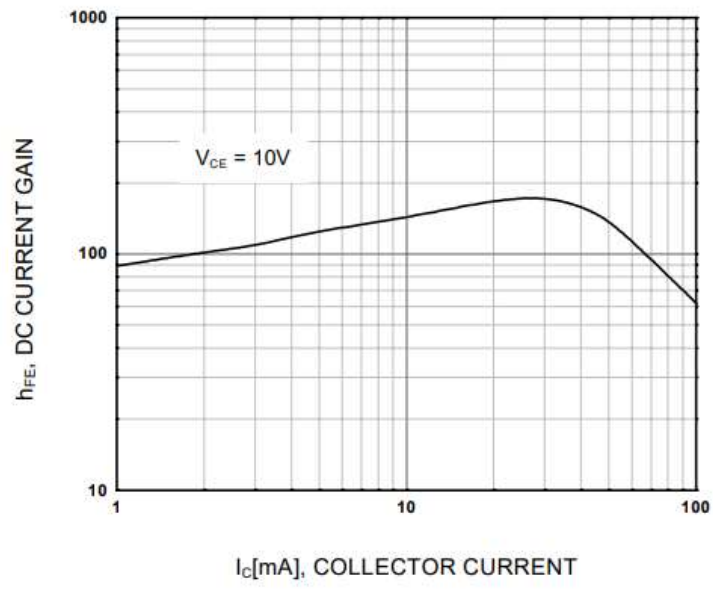


Figure 1. DC current Gain

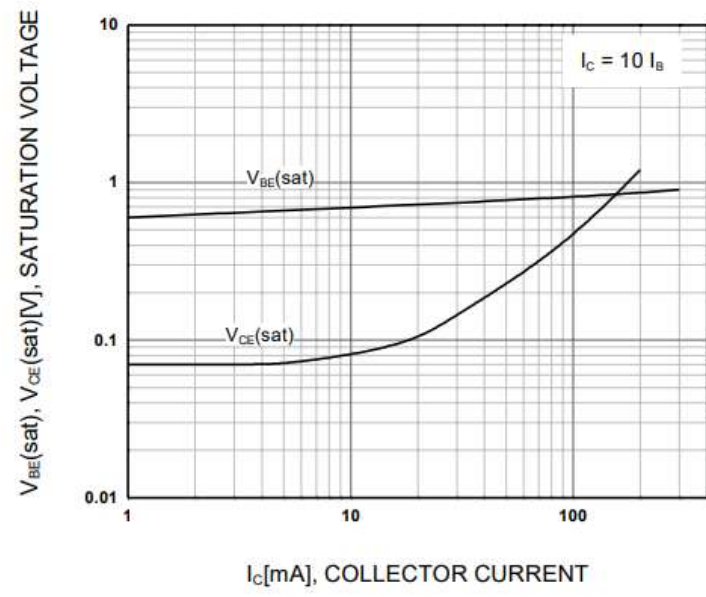
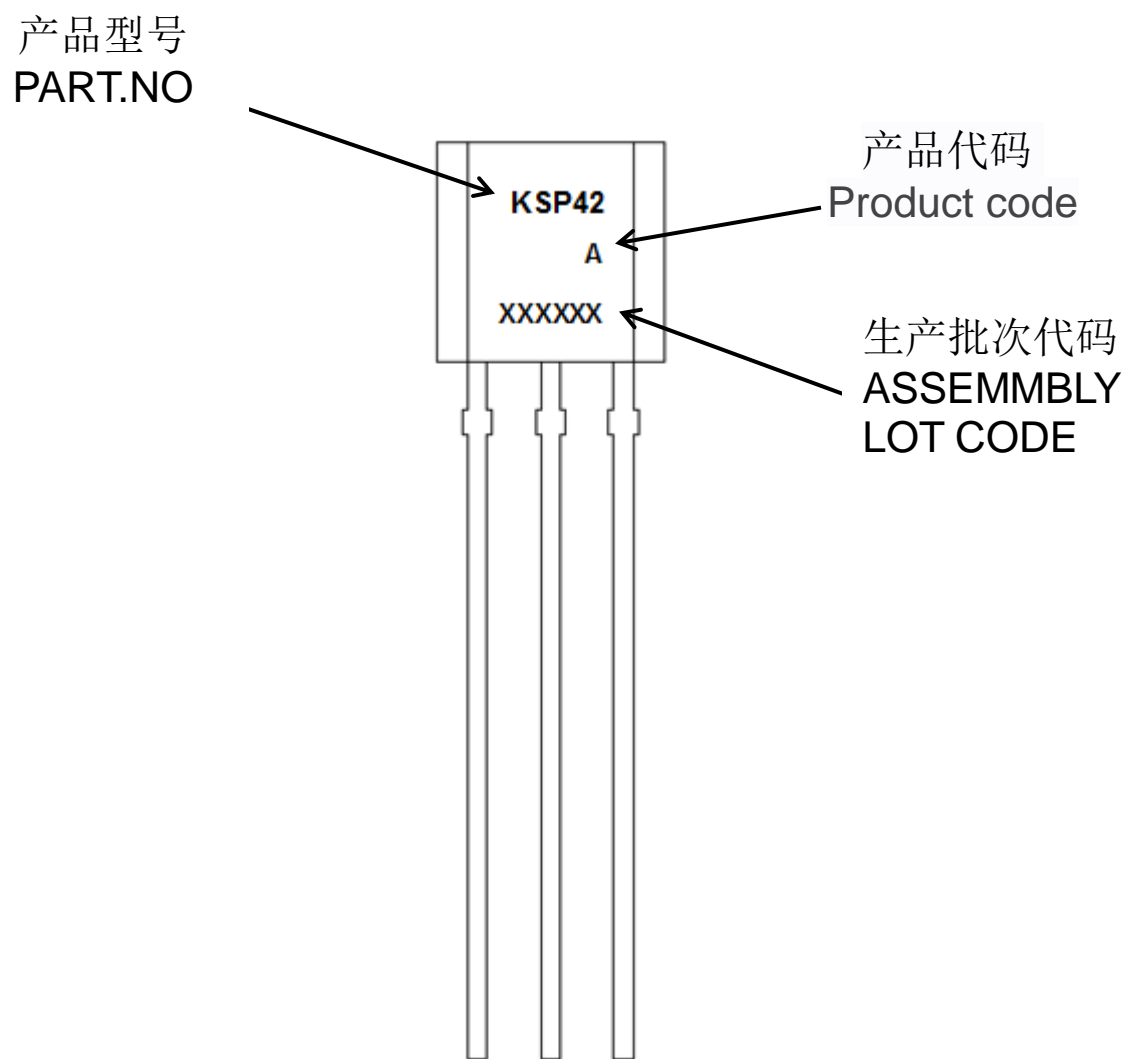
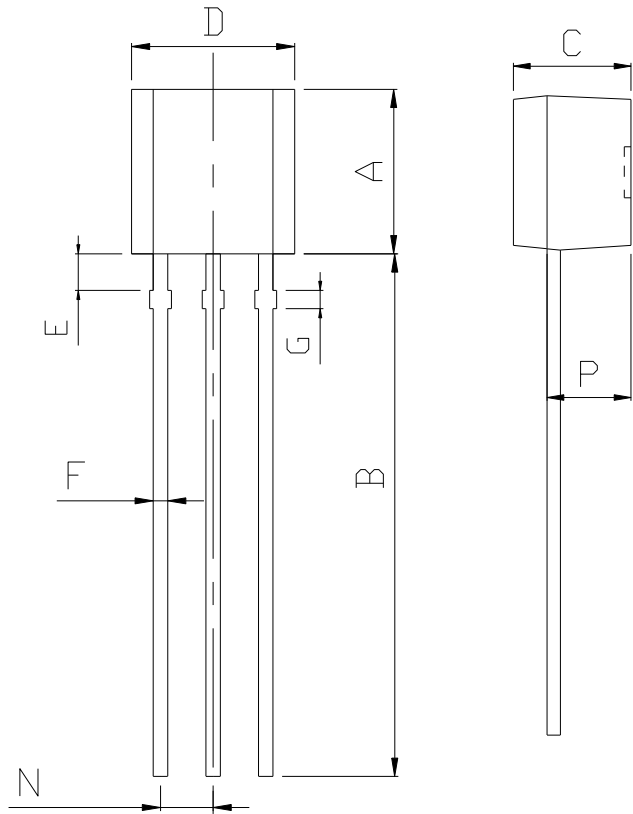


Figure 2. Collector-Emitter Saturation Voltage  
Base-Emitter Saturation Voltage

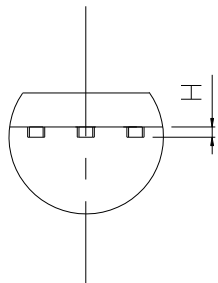
## 印记 Marking:



外形尺寸: Package Dimension



DIM	MILLIMETERS
A	4.55+0.20
B	14.50±0.30
C	3.54±0.20
D	4.56±0.20
E	1.30±0.20
F	0.46±0.20
G	0.50±0.10
H	0.32±0.10
N	1.30±0.20
P	2.52±0.20



(Units: mm)