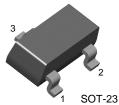
# FAIRCHILD

SEMICONDUCTOR

# **KSC3265**

## Low Frequency Amplifier

Complement to KSA1298



KSC3265

1. Base 2. Emitter 3. Collector

# **NPN Epitaxial Silicon Transistor**

## Absolute Maximum Ratings T<sub>a</sub>=25°C unless otherwise noted

Symbol	Parameter	Value	Units	
V <sub>CBO</sub>	Collector-Base Voltage	30	V	
V <sub>CEO</sub>	Collector-Emitter Voltage	25	V	
V <sub>EBO</sub>	Emitter-Base Voltage	5	V	
c	Collector Current	800	mA	
В	Base Current	160	mA	
Pc	Collector Power Dissipation	200	mW	
ТJ	Junction Temperature	150	°C	
Т <sub>STG</sub>	Storage Temperature	-55 ~ 150	°C	

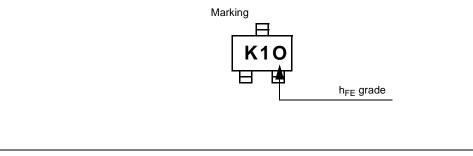
\* Refer to KSD261 for graphs

## **Electrical Characteristics** $T_a=25^{\circ}C$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> =10mA, I <sub>B</sub> =0	25			V
BV <sub>EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> =1mA, I <sub>C</sub> =0	5			V
I <sub>CBO</sub>	Collector Cut-off Current	V <sub>CB</sub> =30V, I <sub>E</sub> =0			100	nA
I <sub>EBO</sub>	Emitter Cut-off Current	V <sub>EB</sub> =5V, I <sub>C</sub> =0			100	nA
h <sub>FE1</sub> h <sub>FE2</sub>	DC Current Gain	V <sub>CE</sub> =1V, I <sub>C</sub> =100mA V <sub>CE</sub> =6V, I <sub>C</sub> =800mA	100 40		320	
V <sub>CE</sub> (sat)	Collector-Emitter Saturation Voltage	I <sub>C</sub> =500mA, I <sub>B</sub> =20mA			0.4	V
V <sub>BE</sub> (on)	Base-Emitter On Voltage	V <sub>CE</sub> =1V, I <sub>C</sub> =10mA	0.5		0.8	V
f <sub>T</sub>	Current Gain Bandwidth Product	V <sub>CE</sub> =5V, I <sub>C</sub> =10mA		120		MHz
C <sub>ob</sub>	Output Capacitance	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz		13		pF

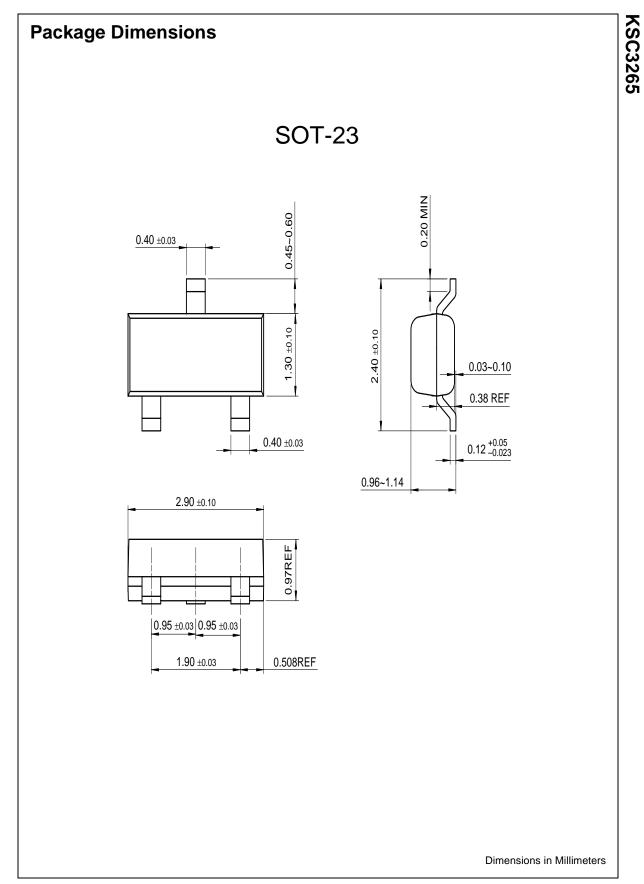
## h<sub>FE</sub> Classification

Classification	0	Y	
h <sub>FE</sub>	100 ~ 200	160 ~ 320	



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2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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#### **Definition of Terms**

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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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