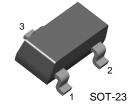


## KSC3265

### **Low Frequency Amplifier**

• Complement to KSA1298



1. Base 2. Emitter 3. Collector

## **NPN Epitaxial Silicon Transistor**

### Absolute Maximum Ratings Ta=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
I <sub>C</sub>	Collector Current	800	mA
I <sub>B</sub>	Base Current	160	mA
P <sub>C</sub>	Collector Power Dissipation	200	mW
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	-55 ~ 150	°C

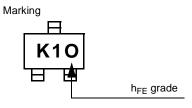
<sup>\*</sup> Refer to KSD261 for graphs

## **Electrical Characteristics** $T_a$ =25°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	$V_{CB}$ =30V, $I_E$ =0			100	nA
I <sub>EBO</sub>	Emitter Cut-off Current	$V_{EB}=5V$ , $I_{C}=0$			100	nA
h <sub>FE1</sub>	DC Current Gain	V <sub>CE</sub> =1V, I <sub>C</sub> =100mA	100		320	
h <sub>FE2</sub>		$V_{CE}$ =6V, $I_{C}$ =800mA	40			
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

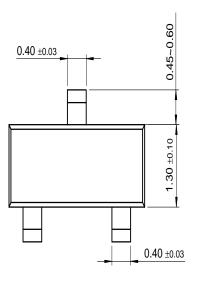
Classification	0	Υ
h <sub>FE</sub>	100 ~ 200	160 ~ 320

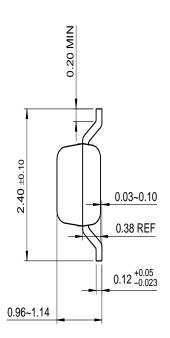


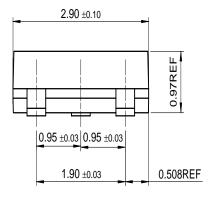
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# **Package Dimensions**

## **SOT-23**







Dimensions in Millimeters

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CoolFET™	FASTr™	MicroFET™	PowerTrench <sup>®</sup>	SuperSOT™-6
CROSSVOLT™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
DOME™	GlobalOptoisolator™	MICROWIRE™	QS™	SyncFET™
EcoSPARK™	GTO™	MSX™	QT Optoelectronics™	TinyLogic™
E <sup>2</sup> CMOS™	HiSeC™	MSXPro™	Quiet Series™	TruTranslation™
EnSigna™	$I^2C^{TM}$	$OCX^{TM}$	RapidConfigure™	UHC™
Across the board.	. Around the world.™	OCXPro™	RapidConnect™	UltraFET <sup>®</sup>
The Power Franchise™		OPTOLOGIC <sup>®</sup>	SILENT SWITCHER®	VCX™
Programmable Active Droop™		OPTOPLANAR™	SMART START™	

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