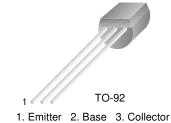


# KSP6520/6521

- Amplifier Transistor

   Collector-Emitter Voltage: V<sub>CEO</sub>=25V

   Collector Power Dissipation: P<sub>C</sub> (max)=625mW



# **NPN Epitaxial Silicon Transistor**

# **Absolute Maximum Ratings** $T_a$ =25°C unless otherwise noted

Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage	40	V
V <sub>CEO</sub>	Collector-Emitter Voltage	25	V
V <sub>EBO</sub>	Emitter-Base Voltage	4	V
I <sub>C</sub>	Collector Current	100	mA
P <sub>C</sub>	Collector Power Dissipation	625	mW
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	-55 ~ 150	°C

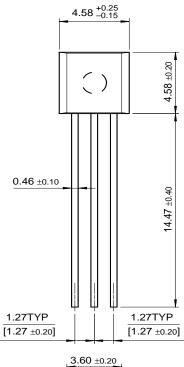
# **Electrical Characteristics** $T_a$ =25°C unless otherwise noted

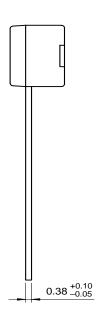
Symbol	Parameter	Test Condition	Min.	Typl	Max.	Units
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> =0.5mA, I <sub>B</sub> =0	25			V
BV <sub>EBO</sub>	Emitter Base Breakdown Voltage	I <sub>C</sub> =10, I <sub>C</sub> =0	4			V
Ісво	Collector Cut-off Current	V <sub>CB</sub> =30V, I <sub>E</sub> =0 V <sub>CE</sub> =20V, I <sub>E</sub> =0			50 50	nA nA
h <sub>FE</sub>	DC Current Gain : KSP6520 : KSP6521 : KSP6520 : KSP6520	$I_{C}$ =100 $\mu$ A, $V_{CE}$ =10 $V$ $I_{C}$ =2 $m$ A, $V_{CE}$ =10 $V$	100 150 200 300		400 600	
V <sub>CE</sub> (sat)	Collector-Emitter Saturation Voltage	I <sub>C</sub> =50mA, I <sub>B</sub> =5mA			0.5	V
C <sub>ob</sub>	Output Capacitance	V <sub>CB</sub> =10V, I <sub>E</sub> =0 f=100KHz			3.5	pF
NF	Noise Figure	$I_C$ =10μA, $V_{CE}$ =5V $R_S$ =10K $\Omega$ $f$ =10Hz to 10KHz			3	dB

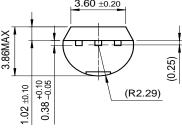


# KSP6520/6521

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E <sup>2</sup> CMOS™	HiSeC™	MSXPro™	Quiet Series™	TruTranslation™
EnSigna™	$I^2C^{TM}$	OCXTM	RapidConfigure™	UHC™
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The Power Franc	hise™	OPTOLOGIC <sup>®</sup>	SILENT SWITCHER®	VCX™
Programmable Ad	ctive Droop™	OPTOPLANAR™	SMART START™	

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Rev. I1

## **PRODUCT STATUS DEFINITIONS**

### **Definition of Terms**

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