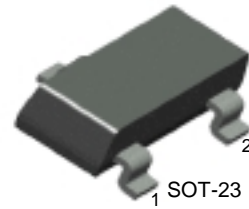


KST6428

Amplifier Transistor



1 SOT-23
1. Base 2. Emitter 3. Collector

NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings $T_a=25^\circ\text{C}$ unless otherwise noted

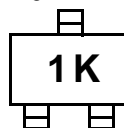
Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current	200	mA
P_C	Collector Dissipation	350	mW
T_{STG}	Storage Temperature	150	$^\circ\text{C}$

• Refer to KST5088 for graphs

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

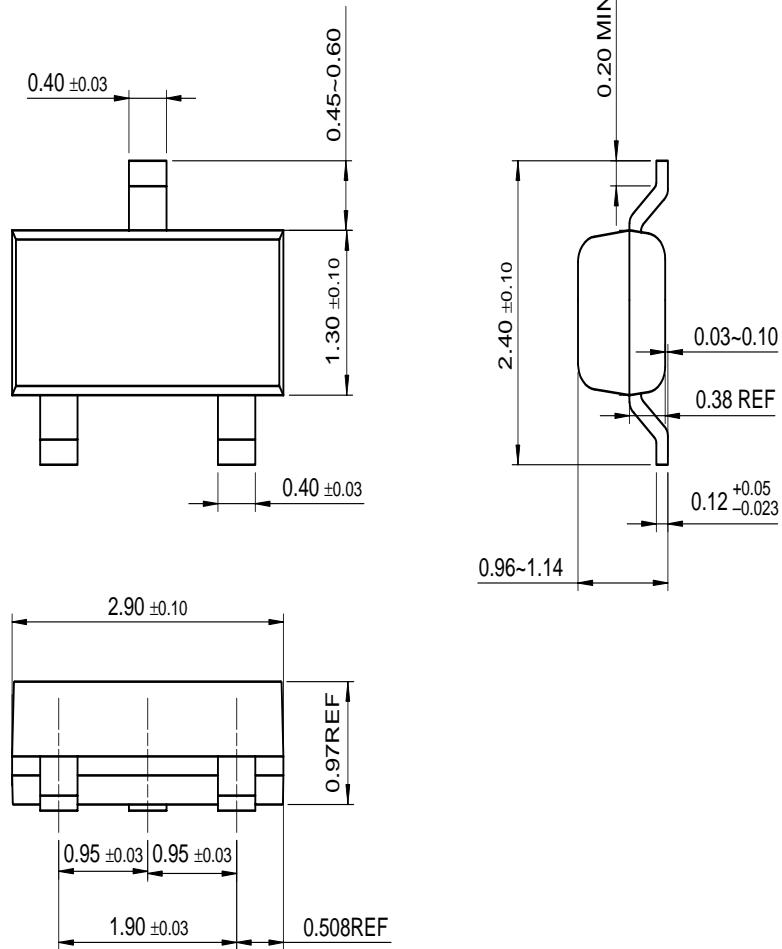
Symbol	Parameter	Test Condition	Min.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	$I_C=100\mu\text{A}$, $I_E=0$	60		V
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C=1\text{mA}$, $I_B=0$	50		V
I_{CBO}	Collector Cut-off Current	$V_{CB}=30\text{V}$, $I_E=0$		0.01	μA
I_{CEO}	Collector Cut-off Current	$V_{CE}=30\text{V}$, $I_B=0\text{V}$		0.1	μA
I_{EBO}	Emitter Cut-off Current	$V_{EB}=5\text{V}$, $I_C=0$		0.01	μA
h_{FE}	DC Current Gain	$V_{CE}=5\text{V}$, $I_C=0.01\text{mA}$ $V_{CE}=5\text{V}$, $I_C=0.1\text{mA}$ $V_{CE}=5\text{V}$, $I_C=1.0\text{mA}$ $V_{CE}=5\text{V}$, $I_C=10\text{mA}$	250 250 250 250	650	V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=10\text{mA}$, $I_B=0.5\text{mA}$ $I_C=100\text{mA}$, $I_B=5\text{mA}$		0.2 0.6	V
$V_{BE(on)}$	Base-Emitter On Voltage	$V_{CE}=5\text{V}$, $I_C=1\text{mA}$	0.56	0.66	pF
C_{ob}	Output Capacitance	$V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$		3	MHz
f_T	Current Gain Bandwidth Product	$V_{CE}=5\text{V}$, $I_C=0\text{mA}$, $f=100\text{MHz}$	100	700	

Marking



Package Dimensions

SOT-23



Dimensions in Millimeters

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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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