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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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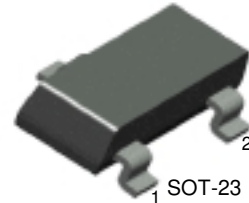
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KST4124

General Purpose Transistor



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	30	V
V_{CEO}	Collector-Emitter Voltage	25	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	200	mA
P_C	Collector Dissipation	350	mW
T_{STG}	Storage Temperature	150	$^\circ\text{C}$

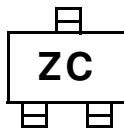
• Refer to KST3904 for graphs

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

Symbol	Parameter	Test Condition	Min.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	$I_C=10\mu\text{A}, I_E=0$	30		V
BV_{CEO}	* Collector-Emitter Breakdown Voltage	$I_C=1.0\text{mA}, I_B=0$	25		V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_E=10\mu\text{A}, I_C=0$	5		V
I_{CBO}	Collector Cut-off Current	$V_{CB}=20\text{V}, I_E=0$		50	nA
I_{EBO}	Emitter Cut-off Current	$V_{EB}=3\text{V}, I_C=0$		50	nA
h_{FE}	* DC Current Gain	$V_{CE}=1\text{V}, I_C=2\text{mA}$ $V_{CE}=1\text{V}, I_C=50\text{mA}$	120 60	360	
$V_{CE}(\text{sat})$	* Collector-Emitter Saturation Voltage	$I_C=50\text{mA}, I_B=5.0\text{mA}$		0.3	V
$V_{BE}(\text{sat})$	* Base-Emitter Saturation Voltage	$I_C=50\text{mA}, I_B=5.0\text{mA}$		0.95	V
f_T	Current Gain Bandwidth Product	$I_C=10\text{mA}, V_{CE}=20\text{V}$ $f=100\text{MHz}$	300		MHz
C_{ob}	Output Capacitance	$V_{CB}=5\text{V}, I_E=0, f=1.0\text{MHz}$		4	pF
NF	Noise Figure	$I_C=100\mu\text{A}, V_{CE}=5\text{V}$ $R_S=1\text{K}\Omega$ $f=10\text{Hz to }15.7\text{KHz}$		5	dB

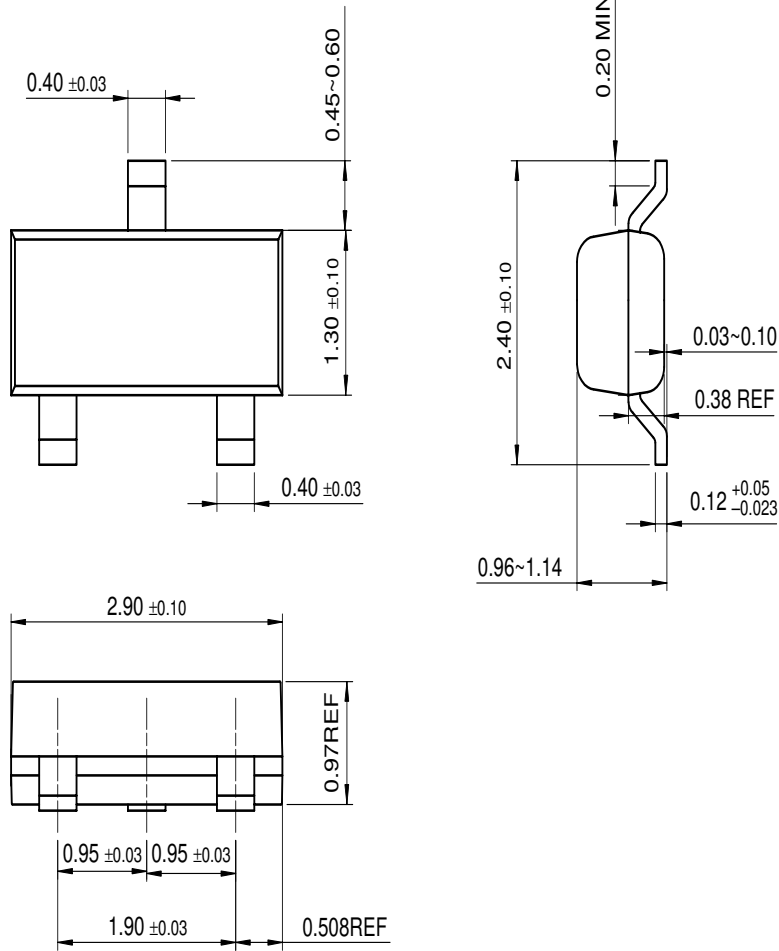
* Pulse Test: $PW \leq 300\mu\text{s}$, Duty Cycle $\leq 2\%$

Marking



Package Dimensions

SOT-23



Dimensions in Millimeters

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