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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!



Contact us

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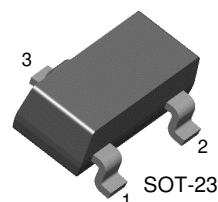
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KST5179

RF Amplifier Transistor



1. Base 2. Emitter 3. Collector

NPN Epitaxial Silicon Transistor

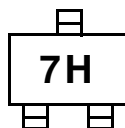
Absolute Maximum Ratings $T_a=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	20	V
V_{CEO}	Collector-Emitter Voltage	12	V
V_{EBO}	Emitter-Base Voltage	2.5	V
I_C	Collector Current	50	mA
P_C	Collector Power Dissipation ($T_a=25^\circ\text{C}$)	350	mW
	Derate above 25°C	2.8	mW/ $^\circ\text{C}$
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	-55 ~ 150	$^\circ\text{C}$

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

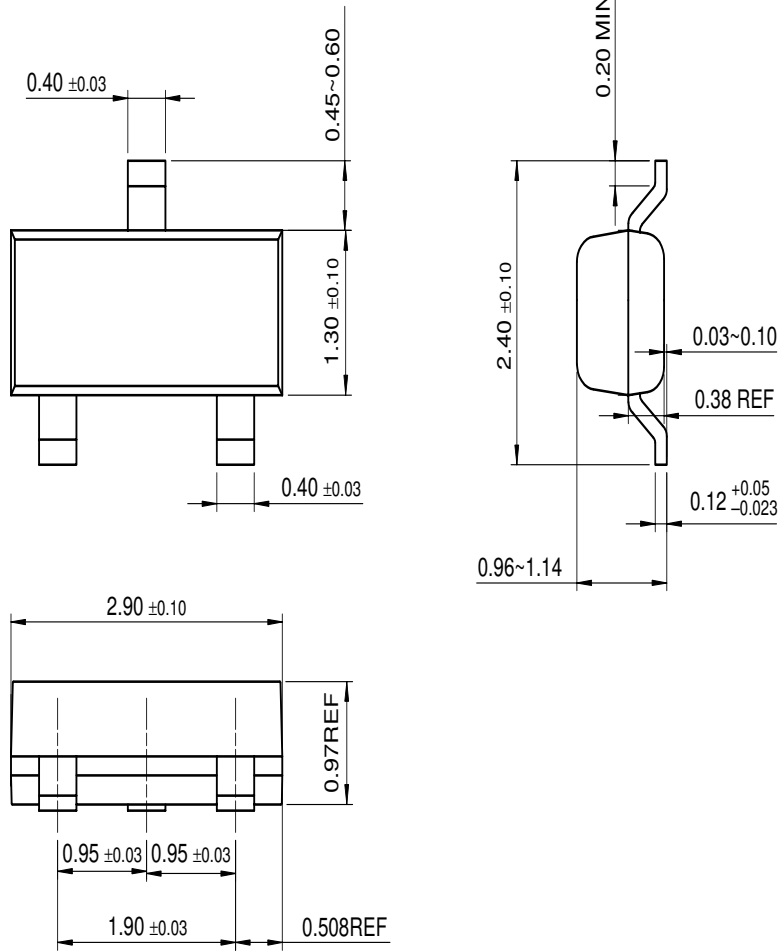
Symbol	Parameter	Test Condition	Min.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	$I_C=0.01\text{mA}$, $I_E=0$	20		V
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C=3\text{mA}$, $I_B=0$	12		V
BV_{EBO}	Emitter Base Breakdown Voltage	$I_E=0.01\text{mA}$, $I_C=0$	2.5		V
I_{CBO}	Collector Cut-off Current	$V_{CB}=15\text{V}$, $I_E=0$		0.02	μA
h_{FE}	DC Current Gain	$V_{CE}=1\text{V}$, $I_C=3\text{mA}$	25		
$V_{CE}(\text{sat})$	Collector-Emitter Saturation Voltage	$I_C=10\text{mA}$, $I_B=1\text{mA}$		0.4	V
$V_{BE}(\text{sat})$	Base-Emitter Saturation Voltage	$I_C=10\text{mA}$, $I_B=1\text{mA}$		1	V
f_T	Current Gain Bandwidth Product	$V_{CE}=6\text{V}$, $I_C=5\text{mA}$, $f=100\text{MHz}$	900		MHz
C_{ob}	Output Capacitance	$V_{CB}=10\text{V}$, $I_E=0$, $f=0.1\text{MHz}$ to 1MHz		1	pF
h_{fe}	Small Signal Current Gain	$V_{CE}=6\text{V}$, $I_C=2\text{mA}$, $f=1\text{KHz}$	25		
NF	Noise Figure	$V_{CE}=6\text{V}$, $I_C=1.5\text{mA}$, $f=200\text{MHz}$ $R_S=50\Omega$		4.5	dB
G_{PE}	Power Gain	$V_{CE}=6\text{V}$, $I_C=5\text{mA}$, $f=200\text{MHz}$	15		dB

Marking



Package Dimensions

SOT-23



Dimensions in Millimeters

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