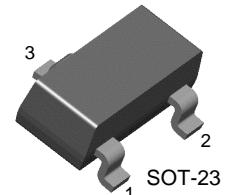


Driver Transistor

- Collector-Emitter Voltage: $V_{CEO} = KST05: 60V$
 $KST06: 80V$
- Collector Power Dissipation: P_C (max) = 350mW
- Complement to KST55/56



1. Base 2. Emitter 3. Collector

NPN Epitaxial Silicon Transistor

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

Symbol	Parameter	Value	Units
V_{CBO}	Collecto-Base Voltage : KST05 : KST06	60 80	V
V_{CEO}	Collector-Emitter Voltage : KST05 : KST06	60 80	V
V_{EBO}	Emitter-Base Voltage	4	V
I_C	Collector Current	500	mA
P_C	Collector Power Dissipation	350	mW
T_{STG}	Storage Temperature	150	$^\circ C$
$R_{TH(j-a)}$	Thermal Resistance junction to Ambient	357	$^\circ C/W$

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

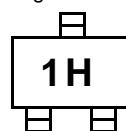
Symbol	Parameter	Test Condition	Min.	Max.	Units
BV_{CEO}	* Collector-Emitter Breakdown Voltage : KST05 : KST06	$I_C=1mA, I_B=0$	60 80		V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_E=100\mu A, I_C=0$	4		V
I_{CBO}	Collector Cut-off Current : KST05 : KST06	$V_{CB}=60V, I_E=0$ $V_{CB}=80V, I_E=0$		0.1 0.1	μA
I_{CEO}	Collector Cut-off Current	$V_{CE}=60V, I_B=0$		0.1	μA
h_{FE}	DC Current Gain	$V_{CE}=1V, I_C=10mA$ $V_{CE}=1V, I_C=100mA$	50 50		
$V_{CE}(\text{sat})$	Collector-Emitter Saturation Voltage	$I_C=100mA, I_B=10mA$		0.25	V
$V_{BE}(\text{on})$	Base-Emitter On Voltage	$V_{CE}=1V, I_C=100mA$		1.2	V
f_T	Current Gain Bandwidth Product	$V_{CE}=2V, I_C=100mA, f=100MHz$	100		MHz

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

Marking Code

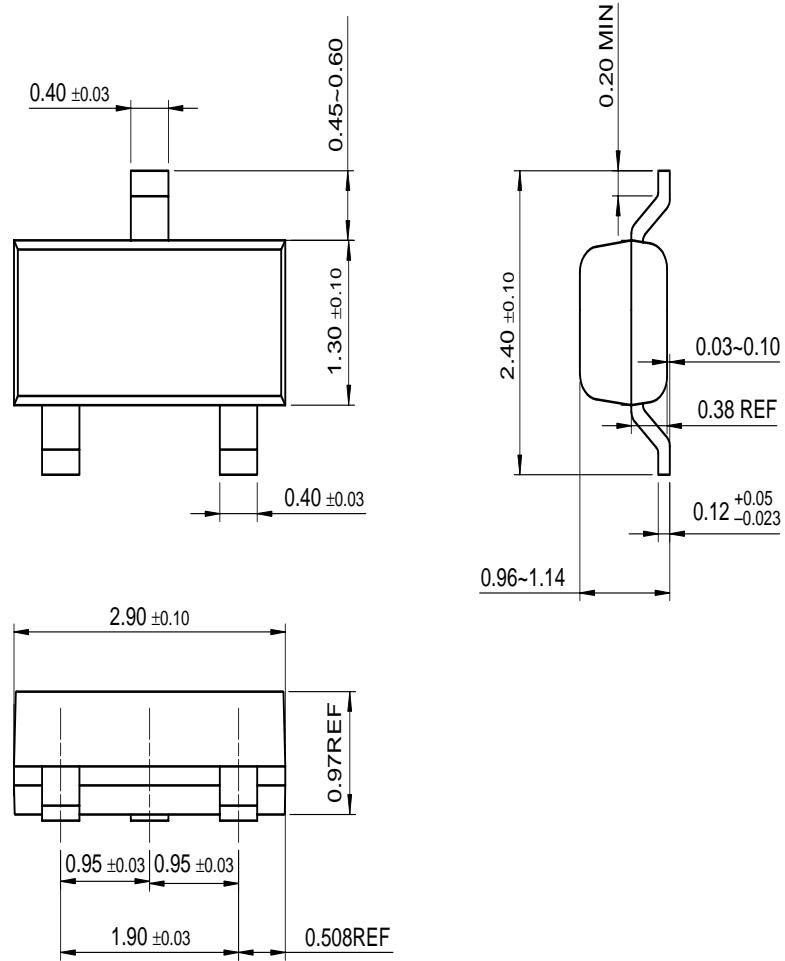
Type	KST05	KST06
Mark	1H	1G

Marking



Package Dimensions

SOT-23



Dimensions in Millimeters

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