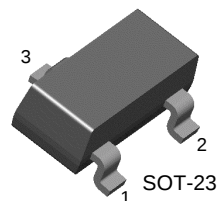


KST92/93

High Voltage Transistor



1. Base 2. Emitter 3. Collector

PNP Epitaxial Silicon Transistor

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

Symbol	Parameter	Value	Units
V_{CBO}	Collector Base Voltage		
	: KST92	-300	V
	: KST93	-200	V
V_{CEO}	Collector-Emitter Voltage		
	: KST92	-300	V
	: KST93	-200	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-500	mA
P_C	Collector Power Dissipation	350	mW
T_{STG}	Storage Temperature	150	$^\circ\text{C}$
$R_{TH(j-a)}$	Thermal Resistance junction to Ambient	357	$^\circ\text{C/W}$

• Refer to KSP92/93 for graphs

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

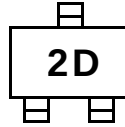
Symbol	Parameter	Test Condition	Min.	Max.	Units
BV _{CBO}	Collector-Base Breakdown Voltage : KST92 : KST93	I _C = -100μA, I _E =0	-300 -200		V V
BV _{CEO}	* Collector-Emitter Breakdown Voltage : KST92 : KST93	I _C = -1mA, I _B =0	-300 -200		V V
BV _{EBO}	Emitter-Base Breakdown Voltage	I _E = -100μA, I _C =0	-5		V
I _{CBO}	Collector Cut-off Current : KST92 : KST93	V _{CB} = -200V, I _E =0 V _{CB} = -160V, I _E =0		-0.25 -0.25	μA μA
I _{EBO}	Emitter Cut-off Current	V _{EB} = -5V, I _C =0		-0.1	μA
h _{FE}	* DC Current Gain	V _{CE} = -10V, I _C = -1mA V _{CE} = -10V, I _C = -10mA V _{CE} = -10V, I _C = -30mA	25 40 25		
V _{CE} (sat)	* Collector-Emitter Saturation Voltage	I _C = -20mA, I _B = -2mA		-0.5	V
V _{BE} (sat)	* Base-Emitter Saturation Voltage	I _C = -20mA, I _B = -2mA		-0.9	V
C _{ob}	Output Capacitance : KST92 : KST93	V _{CB} = -20V, I _E =0 f=1MHz		6 8	pF pF
f _T	Current Gain Bandwidth Product	V _{CE} = -20V, I _C = -10mA f=100MHz	50		MHz

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

Marking Code

Type	KST92	KST93
Mark	2D	2E

Marking



Package Dimensions

SOT-23



Dimensions in Millimeters

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