

KSP92/93

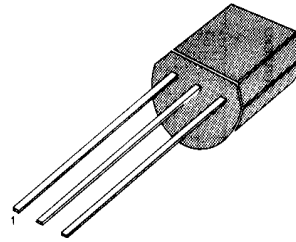
PNP EPITAXIAL SILICON TRANSISTOR

HIGH VOLTAGE TRANSISTOR

ABSOLUTE MAXIMUM RATINGS (T_A=25 °C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage : KSP92	V _{CBO}	-300	V
: KSP93		-200	V
Collector-Emitter Voltage : KSP92	V _{CEO}	-300	V
: KSP93		-200	V
Emitter-Base Voltage	V _{EBO}	-5	V
Collector Current	I _C	-500	mA
Collector Dissipation (T _A =25 °C)	P _C	625	mW
Derate above 25 °C		5	mW/°C
Collector Dissipation (T _A =25 °C)	P _C	1.5	W
Derate above 25 °C		12	mW/°C
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-55 ~ 150	°C

TO-92



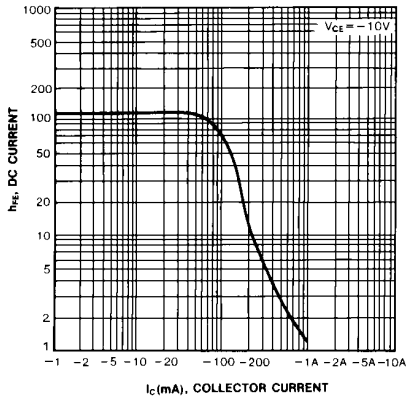
1. Emitter 2. Base 3. Collector

ELECTRICAL CHARACTERISTICS (T_A=25 °C)

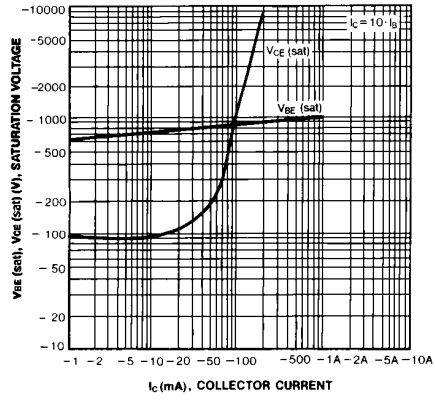
Characteristic	Symbol	Test Conditions	Min	Max	Unit
Collector-Base Breakdown Voltage	BV _{CBO}	I _C = -100 μA, I _E =0			V
:KSP92			-300		V
:KSP93			-200		V
*Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C = -1mA, I _B =0			V
:KSP92			-300		V
:KSP93			-200		V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E = -100 μA, I _C =0		-5	V
Collector Cur-off Current	I _{CBO}				μA
:KSP92		V _{CB} = -200V, I _E =0		-0.25	μA
:KSP93		V _{CB} = -160V, I _E =0		-0.25	μA
Emitter Cut-off Current	I _{EBO}	V _{EB} = -3V, I _C =0		-0.10	μA
*DC Current Gain	h _{FE}	V _{CE} = -10V, I _C = -1mA	25		
		V _{CE} = -10V, I _C = -10mA	40		
		V _{CE} = -10V, I _C = -30mA	25		
*Collector-Emitter Saturation Voltage	V _{CE (sat)}	I _C = -20mA, I _B = -2mA		-0.50	V
*Base-Emitter Saturation Voltage	V _{BE (on)}	I _C = -20mA, I _B = -2mA		-0.90	V
Current Gain Bandwidth Product	f _T	V _{CE} = -20V, I _C = -10mA	50		MHz
Collector Base Capacitance	C _{CB}				pF
:KSP92		V _{CB} = -20V, I _E =0		6	pF
:KSP93		f=1MHz		8	pF

* Pulse Test: PW ≤ 300 μs, Duty Cycle ≤ 2%

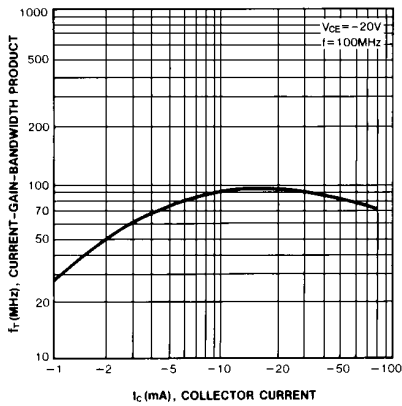
DC CURRENT GAIN



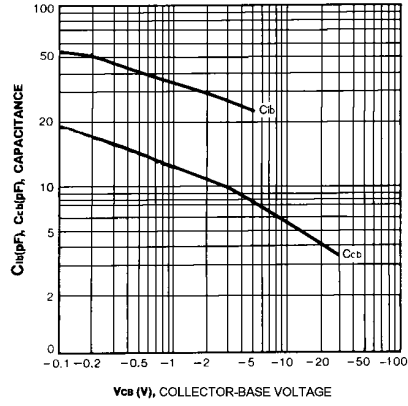
SATURATION VOLTAGES



CURRENT-GAIN-BANDWIDTH PRODUCT



CAPACITANCE



ACTIVE-REGION SAFE OPERATING AREA

