

KSP55/56

PNP EPITAXIAL SILICON TRANSISTOR

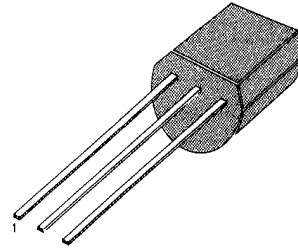
AMPLIFIER TRANSISTOR

- Collector-Emitter Voltage: V_{CE0} =KSP55: 60V
KSP56: 80V
- Collector Dissipation: P_C (max) =625mW

ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}		
:KSP55		-60	V
:KSP56		-80	V
Emitter-Base Voltage	V_{CEO}		
:KSP55		-60	V
:KSP56		-80	V
Emitter-Base Voltage	V_{CEO}	-4	V
Collector Current	I_C	-500	mA
Collector Dissipation	P_C	625	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55~150	$^\circ\text{C}$

TO-92



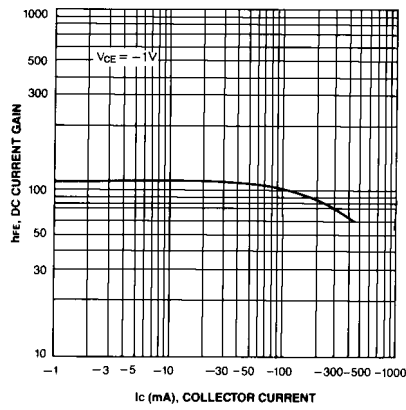
1. Emitter 2. Base 3. Collector

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$)

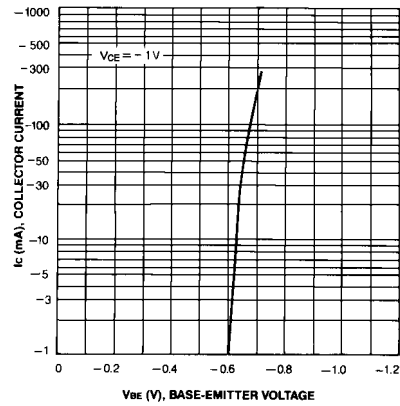
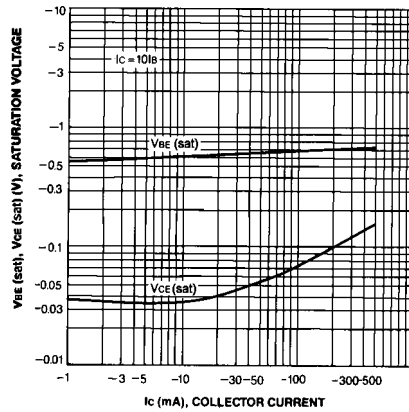
Characteristic	Symbol	Test Conditions	Min	Max	Unit
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C = -1\text{mA}$, $I_B = 0$			V
:KSP55			-60		
:KSP56			-80		
Collector-Base Breakdown Voltage	BV_{EBO}	$I_E = -100\mu\text{A}$, $I_C = 0$	-4		V
Collector Cut-off Current	I_{CBO}	$V_{CB} = -60\text{V}$, $I_E = 0$		-0.1	μA
:KSP55		$V_{CB} = -80\text{V}$, $I_E = 0$		-0.1	μA
:KSP56		$V_{CE} = -60\text{V}$, $I_B = 0$		-0.1	μA
Collector Cut-off Current	I_{CEO}	$V_{CE} = -1\text{V}$, $I_C = -10\text{mA}$	50		
DC Current Gain	h_{FE}	$V_{CE} = -1\text{V}$, $I_C = -100\text{mA}$	50		
Collector-Emitter Saturation Voltage	$V_{CE}(\text{sat})$	$I_C = -100\text{mA}$, $I_B = -10\text{mA}$		-0.25	V
Base-Emitter On Voltage	$V_{BE}(\text{sat})$	$V_{CE} = -1\text{V}$, $I_C = -100\text{mA}$		-1.2	V
Current Gain Bandwidth Product	f_T	$V_{CE} = -2\text{V}$, $I_C = -10\text{mA}$ $f = 100\text{MHz}$	50		MHz

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

DC CURRENT GAIN



BASE-EMITTER ON VOLTAGE

COLLECTOR-EMITTER SATURATION VOLTAGE
BASE-EMITTER SATURATION VOLTAGE

CURRENT GAIN-BANDWIDTH PRODUCT

