

KSP2907A

General Purpose Transistor

- Collector-Emitter Voltage: V_{CEO}= 60V
 Collector Power Dissipation: P_C (max)=625mW
 Refer to KSP2907 for graphs



PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings Ta=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-60	V
V _{CEO}	Collector-Emitter Voltage	-60	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current	-600	mA
P _C	Collector Power Dissipation	625	mW
T _J	Junction Temperature	150	°C
T _{STG}	Storage Temperature	-55 ~ 150	°C

Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV _{CBO}	Collector-Base Breakdown Voltage	$I_C = -10\mu A, I_E = 0$	-60			V
BV _{CEO}	* Collector Emitter Breakdown Voltage	I _C = -10mA, I _B =0	-60			V
BV _{EBO}	Emitter-Base Breakdown Voltage	$I_E = -10\mu A, I_C = 0$	-5			V
I _{CBO}	Collector Cut-off Current	$V_{CB} = -50V, I_{E} = 0$			-10	nA
h _{FE}	DC Current Gain	$ \begin{split} &I_{C}\text{=-0.1mA, V}_{CE}\text{=-10V} \\ &V_{CE}\text{=-10V, I}_{C}\text{=-1mA,} \\ &V_{CE}\text{=-10V, I}_{C}\text{=-10mA} \\ &V_{CE}\text{=-10V, I}_{C}\text{=-150mA} \\ &V_{CE}\text{=-10V, I}_{C}\text{=-500mA} \end{split} $	75 100 100 100 50		300	
V _{CE} (sat)	* Collector-Emitter Saturation Voltage	I _C = -150mA, I _B = -15mA I _C = -500mA, I _B = -50mA			-0.4 -1.6	V V
V _{BE} (sat)	Base Emitter Saturation Voltage	I _C = -150mA, I _B = -15mA I _C = -500mA, I _B = -50mA			-1.3 -2.6	V V
C _{ob}	Output Capacitance	V _{CB} = -10V, I _E =0 f=1MHz			8	pF
f _T	* Current Gain Bandwidth Product	I _C = -50mA, V _{CE} = -20V f=100MHz	200			MHz
t _{ON}	Turn On Time	V_{CC} = -30V, I_{C} = -150mA I_{B1} = -15mA			45	ns
t _{OFF}	Turn Off Time	V_{CC} = -6V, I_{C} = -150mA I_{B1} = I_{B2} = -15mA			100	ns

^{*} Pulse Test: Pulse Width≤300μs, Duty Cycle≤2%
* Also available as and PN2907

Typical Characteristics

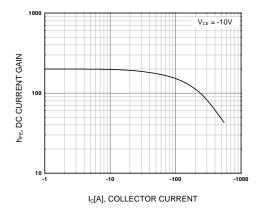


Figure 1. DC current Gain

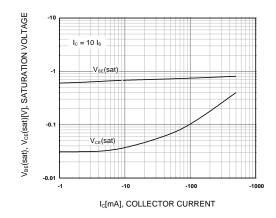


Figure 2. Collector-Emitter Saturation Voltage Base-Emitter Saturation Voltage

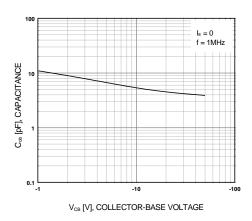


Figure 3. Output Capacitance

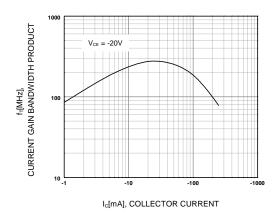
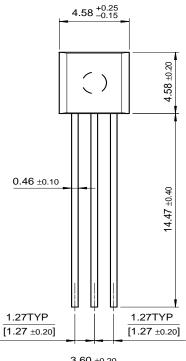
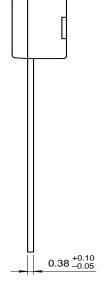
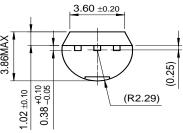


Figure 4. Current Gain Bandwidth Product

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