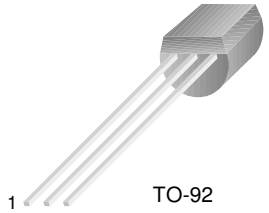
FAIRCHILD
SEMICONDUCTOR®

KSP8598/8599

Amplifier Transistor

- Collector-Emitter Voltage: V_{CEO}= KSP8598: 60V
  KSP8599: 80V
- Collector Power Dissipation: P_C (max)=625mW
- Suffix "-C" means Center Collector (1. Emitter 2. Collector 3. Base)



TO-92

1. Emitter 2. Base 3. Collector

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings T_a=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage		
	: KSP8598	-60	V
	: KSP8599	-80	V
V_{CEO}	Collector-Emitter Voltage		
	: KSP8598	-60	V
	: KSP8599	-80	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-500	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.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	I_C= -100μA, I_E=0			
	: KSP8598		-60		V
	: KSP8599		-80		V
BV_{CEO}	* Collector-Emitter Breakdown Voltage	I_C= -10mA, I_B=0			
	: KSP8598		-60		V
	: KSP8599		-80		V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E= -10μA, I_C=0	-5		V
I_{CBO}	Collector Cut-off Current				
	: KSP8598	V_{CB}= -60V, I_E=0		-100	nA
	: KSP8599	V_{CB}= -80V, I_E=0		-100	nA
I_{CEO}	Collector Cut-off Current	V_{CE}= -60V, I_B=0		-100	nA
I_{EBO}	Emitter Cut-off Current	V_{EB}= -4V, I_C=0		-100	nA
h_{FE}	* DC Current Gain	V_{CE}= -5V, I_C= -1mA	100	300	
		V_{CE}= -5V, I_C= -10mA	100		
		V_{CE}= -5V, I_C= -100mA	75		
V_{CE} (sat)	* Collector-Emitter Saturation Voltage	I_C= -100mA, I_B= -5mA		-0.4	V
		I_C= -100mA, I_B= -10mA		-0.3	V
V_{BE} (on)	* Base-Emitter On Voltage				
	: KSP8598	V_{CE}= -5V, I_C= -1mA	-0.5	-0.7	V
	: KSP8599	V_{CE}= -5V, I_C= -10mA	-0.6	-0.8	V
f_T	Current Gain Bandwidth Product	V_{CE}= -5V, I_C= -10mA f=100MHz	150		MHz
C_{ob}	Output Capacitance	V_{CB}= -5V, I_E=0 f=1MHz		8	pF

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

Typical Characteristics

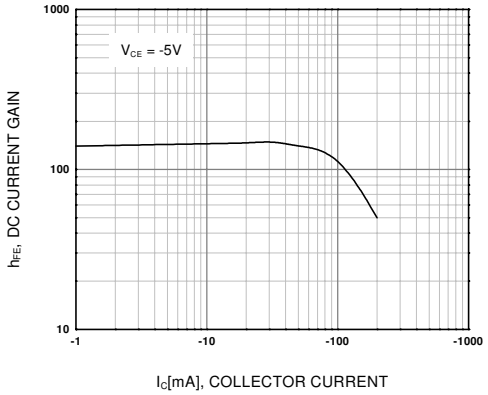


Figure 1. DC current Gain

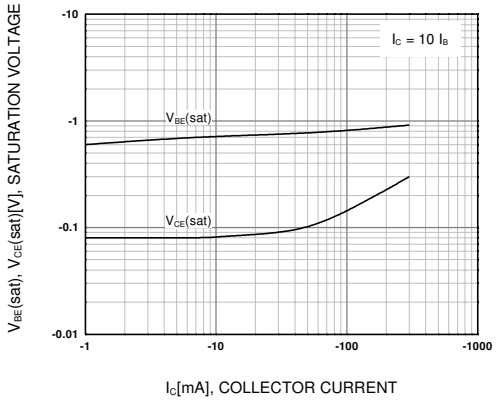


Figure 2. Collector-Emitter Saturation Voltage Base-Emitter Saturation Voltage

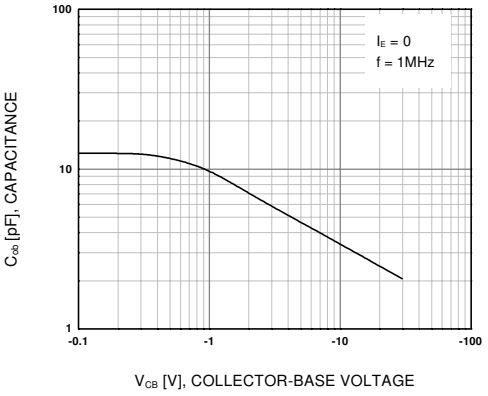


Figure 3. Output Capacitance

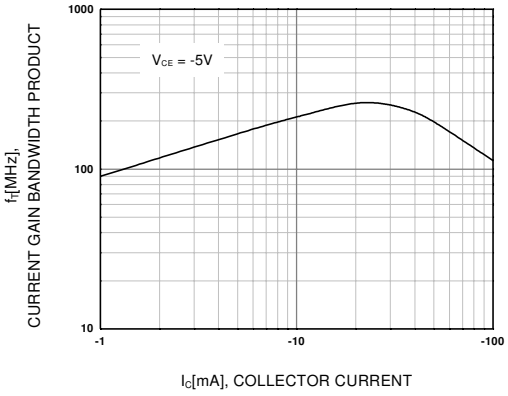


Figure 4. Current Gain Bandwidth Product

Package Demensions

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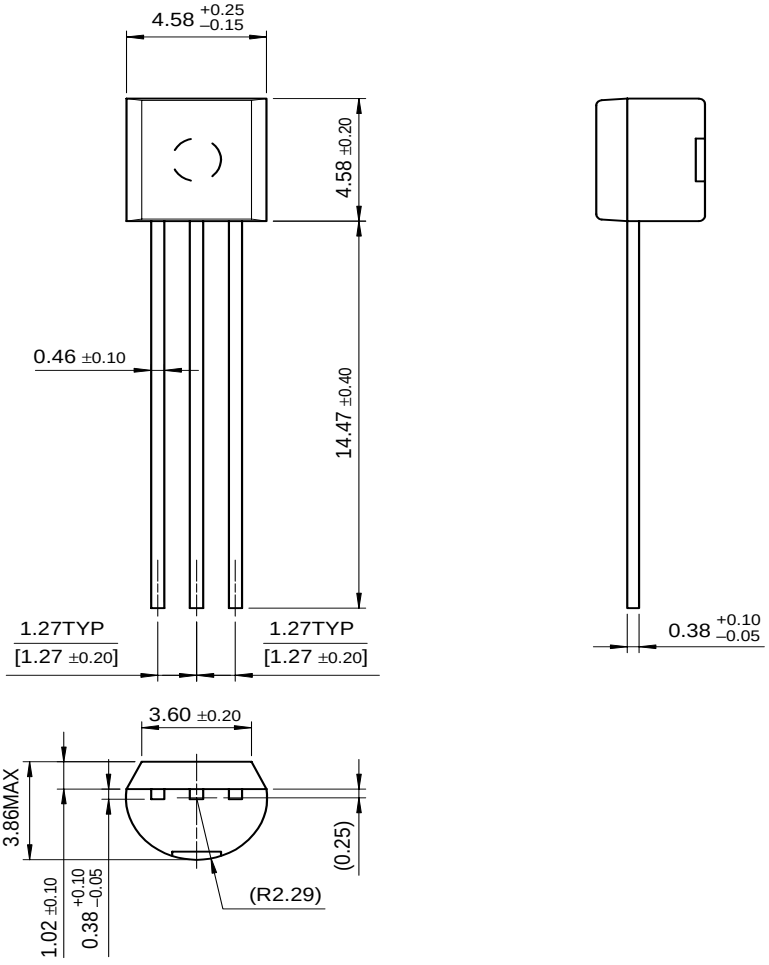

Dimensions in Millimeters

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