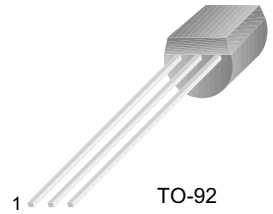
FAIRCHILD
SEMICONDUCTOR TM

KSP8097

Amplifier Transistor

- Collector-Emitter Voltage: V_{CEO}=40V
- Collector Dissipation: P_C (max)=625mW
- Refer to 2N5088 for graphs



TO-92

1. Emitter 2. Base 3. Collector

NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings T_a=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	40	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current	200	mA
P_C	Collector 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.	Typl	Max.	Units
BV_{CEO}	* Collector-Emitter Breakdown Voltage	I_C=100mA, I_B=0	40			V
I_{CBO}	Collector Cut-off Current	V_{CB}=40V, I_E=0 V_{CB}=60V, I_E=0			30 10	nA μA
I_{EBO}	Emitter Cut-off Current	V_{BE}=6V, I_C=0			20	nA
h_{FE}	* DC Current Gain	V_{CE}=5V, I_C=100μA	250		700	
C_{ob}	Output Capacitance	V_{CB}=5V, I_E=0 f=1MHz	1		4	pF
V_{CE} (on)	* Base-Emitter On Voltage	I_C=100μA, V_{CE}=5V	0.45		0.65	V
NF	Noise Figure	I_C=100μA, V_{CE}=5V R_S=10KΩ, f=10Hz			2	dB

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

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Package Demensions

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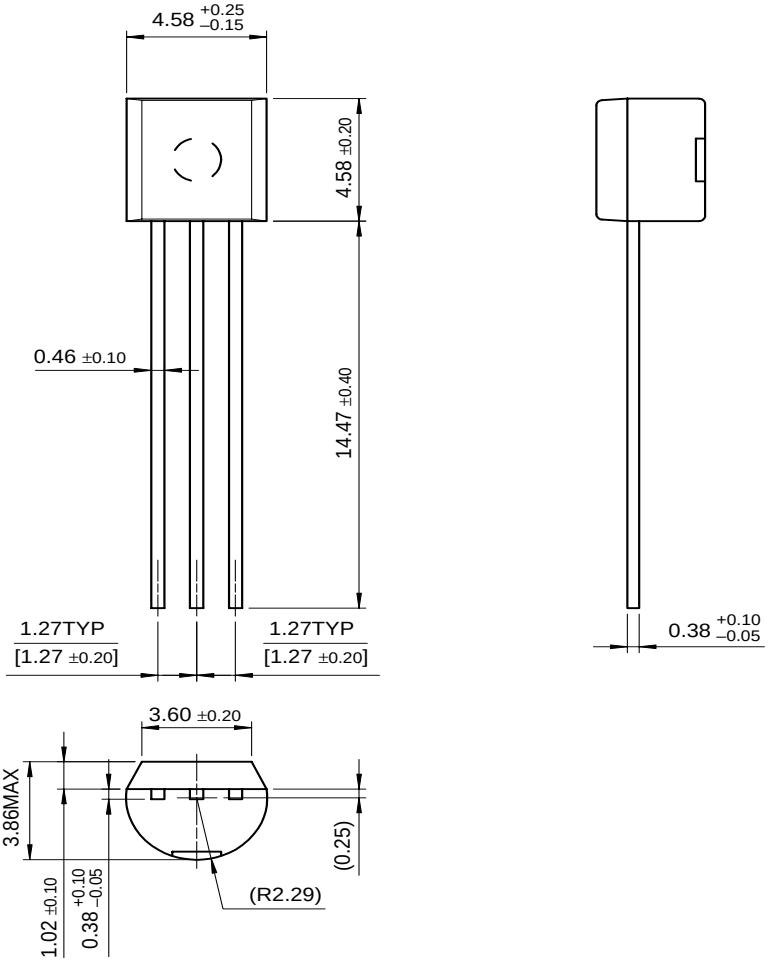

Dimensions in Millimeters

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POP™
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QFET™
QS™
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SuperSOT™-3
SuperSOT™-6
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PRODUCT STATUS DEFINITIONS

Definition of Terms

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