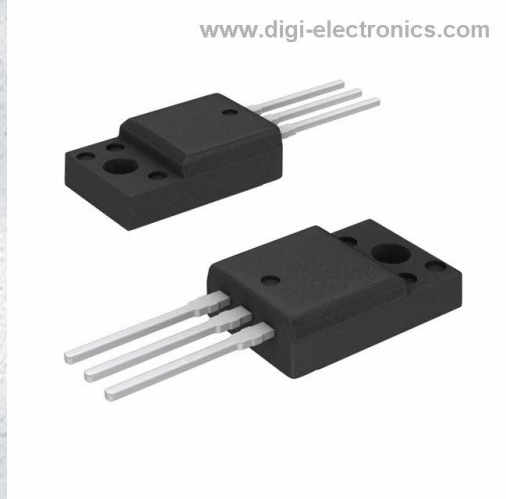
KSB1097OTU Datasheet



DiGi Electronics Part Number	KSB1097OTU-DG
Manufacturer	onsemi
Manufacturer Product Number	KSB1097OTU
Description	TRANS PNP 60V 7A TO220F-3
Detailed Description	Bipolar (BJT) Transistor PNP 60 V 7 A 2 W Through Hole TO-220F-3

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Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
KSB1097OTU	onsemi
Series:	Product Status:
-	Obsolete
Transistor Type:	Current - Collector (Ic) (Max):
PNP	7 A
Voltage - Collector Emitter Breakdown (Max):	Vce Saturation (Max) @ Ib, Ic:
60 V	500mV @ 500mA, 5A
Current - Collector Cutoff (Max):	DC Current Gain (hFE) (Min) @ Ic, Vce:
10µA (ICBO)	60 @ 3A, 1V
Power - Max:	Frequency - Transition:
2 W	-
Operating Temperature:	Mounting Type:
150°C (TJ)	Through Hole
Package / Case:	Supplier Device Package:
TO-220-3 Full Pack	TO-220F-3
Base Product Number:	
KSB10	

Environmental & Export classification

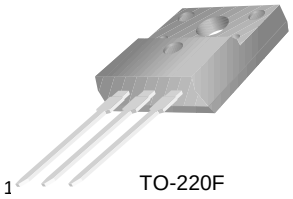
Moisture Sensitivity Level (MSL):	REACH Status:
1 (Unlimited)	REACH Unaffected
ECCN:	HTSUS:
EAR99	8541.29.0095

FAIRCHILD SEMICONDUCTOR™

KSB1097

Low Frequency Power Amplifier

- Low Speed Switchng Industrial Use
- Complement to KSD1588



TO-220F

1.Base 2.Collector 3.Emitter

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	- 80	V
V_{CEO}	Collector-Emitter Voltage	- 60	V
V_{EBO}	Emitter-Base Voltage	- 7	V
I_C	Collector Current (DC)	- 7	A
I_{CP}	*Collector Current (Pulse)	- 15	A
I_B	Base Current	- 3.5	A
P_C	Collector Dissipation (T_a=25°C)	2	W
P_C	Collector Dissipation (T_C=25°C)	30	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	- 55 ~ 150	°C

* PW≤300μs, Duty Cycle≤10%

Electrical Characteristics T_C=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
I_{CBO}	Collector Cut-off Current	V_{CB} = - 60V, I_E = 0		- 10	μA
I_{EBO}	Emitter Cut-off Current	V_{EB} = - 5V, I_C = 0		- 10	μA
h_{FE1} h_{FE2}	* DC Current Gain	V_{CE} = - 1V, I_C = - 3A V_{CE} = - 1V, I_C = - 5A	40 20	200	
V_{CE}(sat)	Collector-Emitter Saturation Voltage	I_C = - 5A, I_B = - 0.5A		- 0.5	V
V_{BE}(sat)	* Base-Emitter Saturation Voltage	I_C = - 5A, I_B = - 0.5A		- 1.5	V

*** Pulse Test: PW≤350μs, Duty Cycle≤2% Pulsed**

h_{FE} Classification

Classification	R	O	Y
h_{FE1}	40 ~ 80	60 ~ 120	100 ~ 200

Typical Characteristics

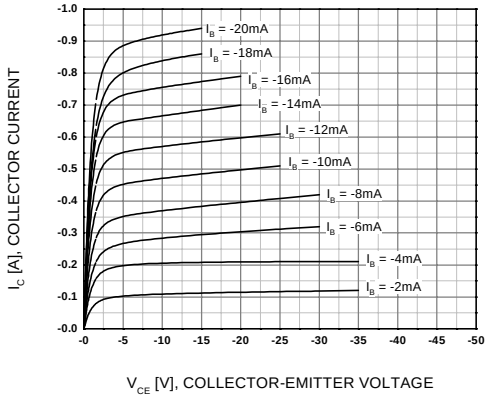


Figure 1. Static Characteristics

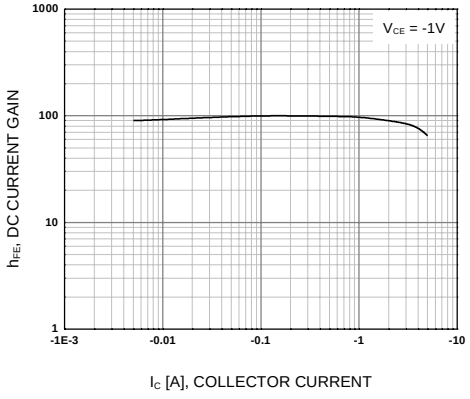


Figure 2. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

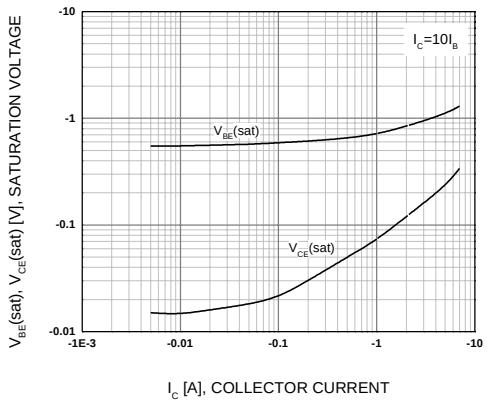


Figure 3. Saturation Voltage

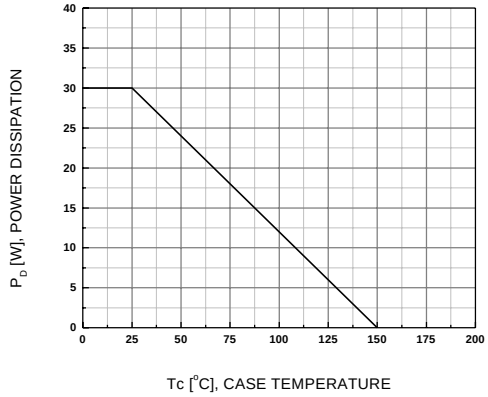


Figure 4. Power Derating

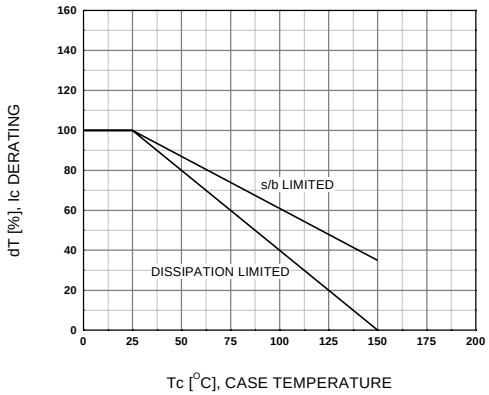


Figure 5. Power Derating

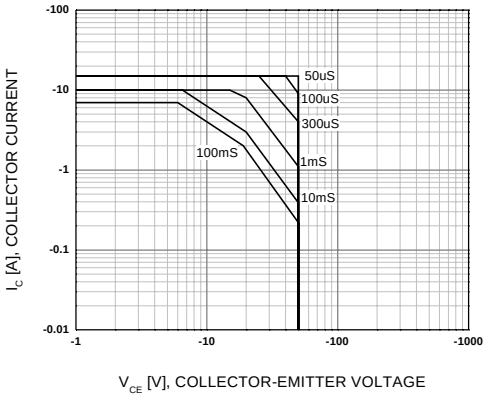
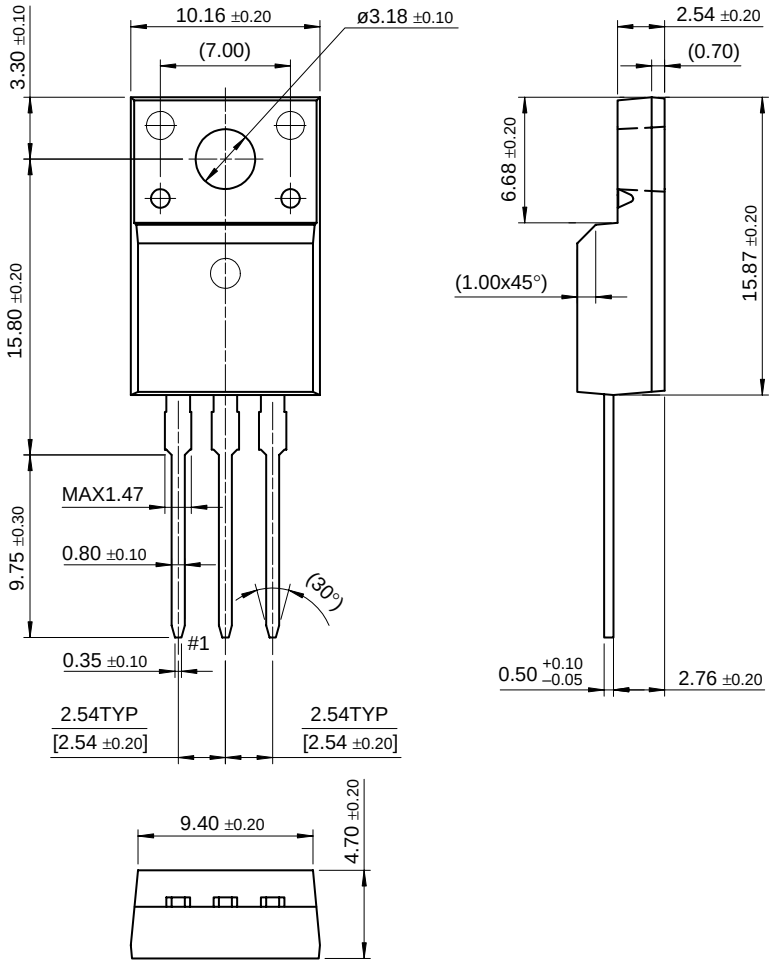


Figure 6. Safe Operating Area

Package Demensions

TO-220F



Dimensions in Millimeters

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Datasheet Identification	Product Status	Definition
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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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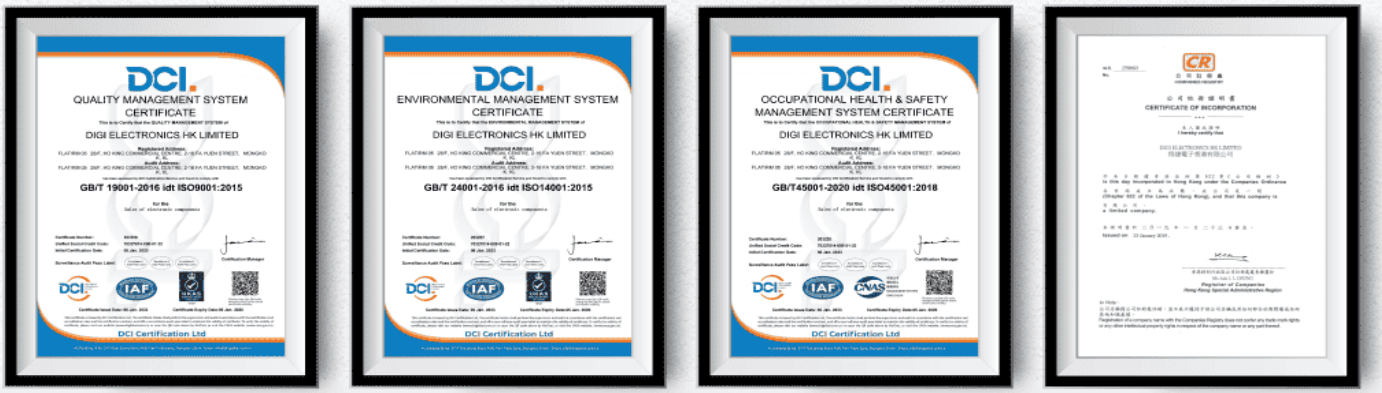

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