

KSB546YTU Datasheet

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DiGi Electronics Part Number	KSB546YTU-DG
Manufacturer	onsemi
Manufacturer Product Number	KSB546YTU
Description	TRANS PNP 150V 2A TO220-3
Detailed Description	Bipolar (BJT) Transistor PNP 150 V 2 A 5MHz 25 W Th rough Hole TO-220-3



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Purchase and inquiry

Manufacturer Product Number:

KSB546YTU

Series:

-

Transistor Type:

PNP

Voltage - Collector Emitter Breakdown (Max):

150 V

Current - Collector Cutoff (Max):

50 μ A (ICBO)

Power - Max:

25 W

Operating Temperature:

150°C (TJ)

Package / Case:

TO-220-3

Base Product Number:

KSB546

Manufacturer:

onsemi

Product Status:

Last Time Buy

Current - Collector (Ic) (Max):

2 A

Vce Saturation (Max) @ Ib, Ic:

1V @ 50mA, 500mA

DC Current Gain (hFE) (Min) @ Ic, Vce:

120 @ 400mA, 10V

Frequency - Transition:

5MHz

Mounting Type:

Through Hole

Supplier Device Package:

TO-220-3

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8541.29.0095

Moisture Sensitivity Level (MSL):

Not Applicable

ECCN:

EAR99



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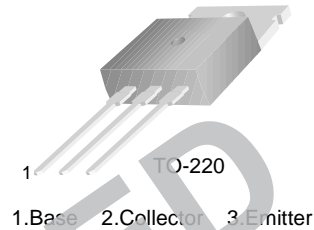


KSB546

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TV Vertical Deflection Output

- Collector-Base Voltage : $V_{CBO} = -200V$
- Collector Current : $I_C = -2A$
- Collector Dissipation : $P_C = 25W$ ($T_C = 25^\circ C$)
- Complement to KSD401



PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings $T_C = 25^\circ C$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	- 200	V
V_{CEO}	Collector-Emitter Voltage	- 150	V
V_{EBO}	Emitter-Base Voltage	- 5	V
I_C	Collector Current(DC)	- 2	A
P_C	Collector Dissipation ($T_C = 25^\circ C$)	25	W
T_J	Junction Temperature	150	$^\circ C$
T_{STG}	Storage Temperature	55 ~ 150	$^\circ C$

Electrical Characteristics $T_C = 25^\circ C$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	$I_C = 500\mu A, I_E = 0$	- 200			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C = - 10mA, I_B = 0$	- 150			V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_E = - 500\mu A, I_C = 0$	- 5			V
I_{CBO}	Collector Cut-off Current	$V_{CB} = - 150V, I_E = 0$			- 50	μA
h_{FE}	DC Current Gain	$V_{CE} = - 10V, I_E = - 0.4A$	40		240	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = - 500mA, I_B = - 50mA$			- 1	V
f_T	Current Gain Bandwidth Product	$V_{CE} = - 10V, I_C = - 0.4A$		5		MHz

h_{FE} Classification

Classification	R	O	Y
h_{FE}	40 ~ 80	70 ~ 140	120 ~ 240

Typical Characteristics

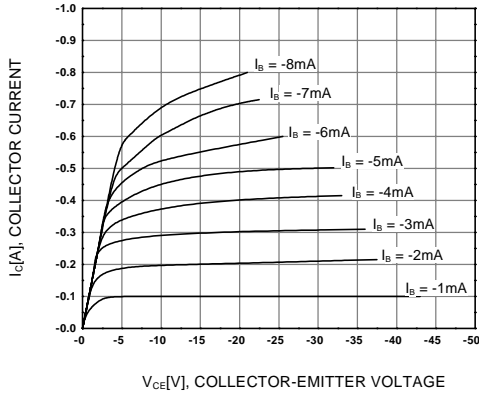


Figure 1. Static Characteristic

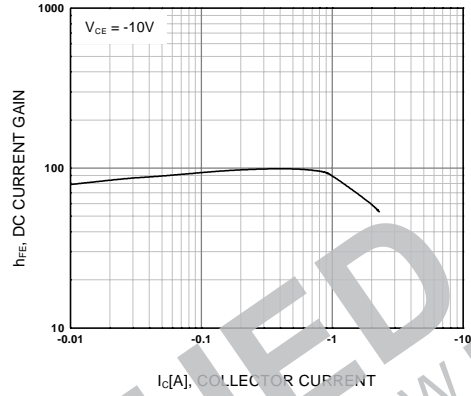


Figure 2. DC current Gain

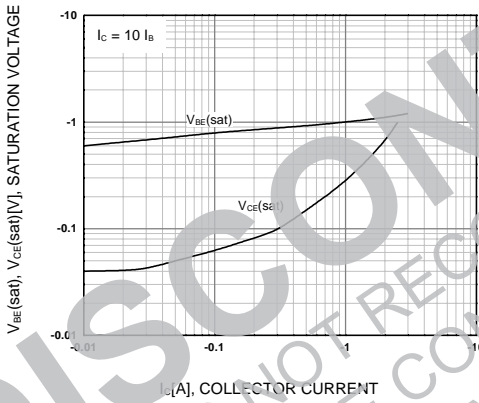


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

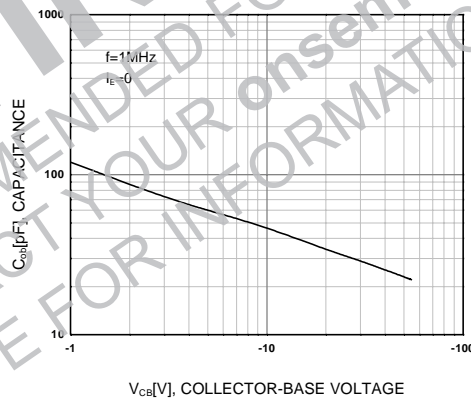


Figure 4. Collector Output Capacitance

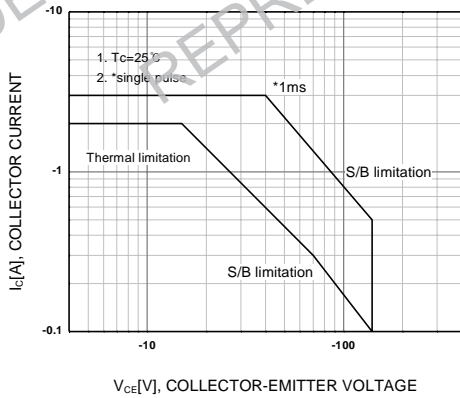


Figure 5. Safe Operating Area

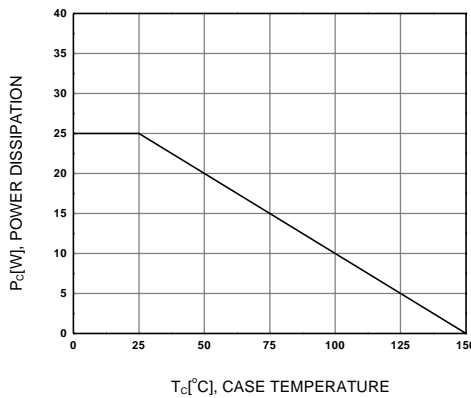
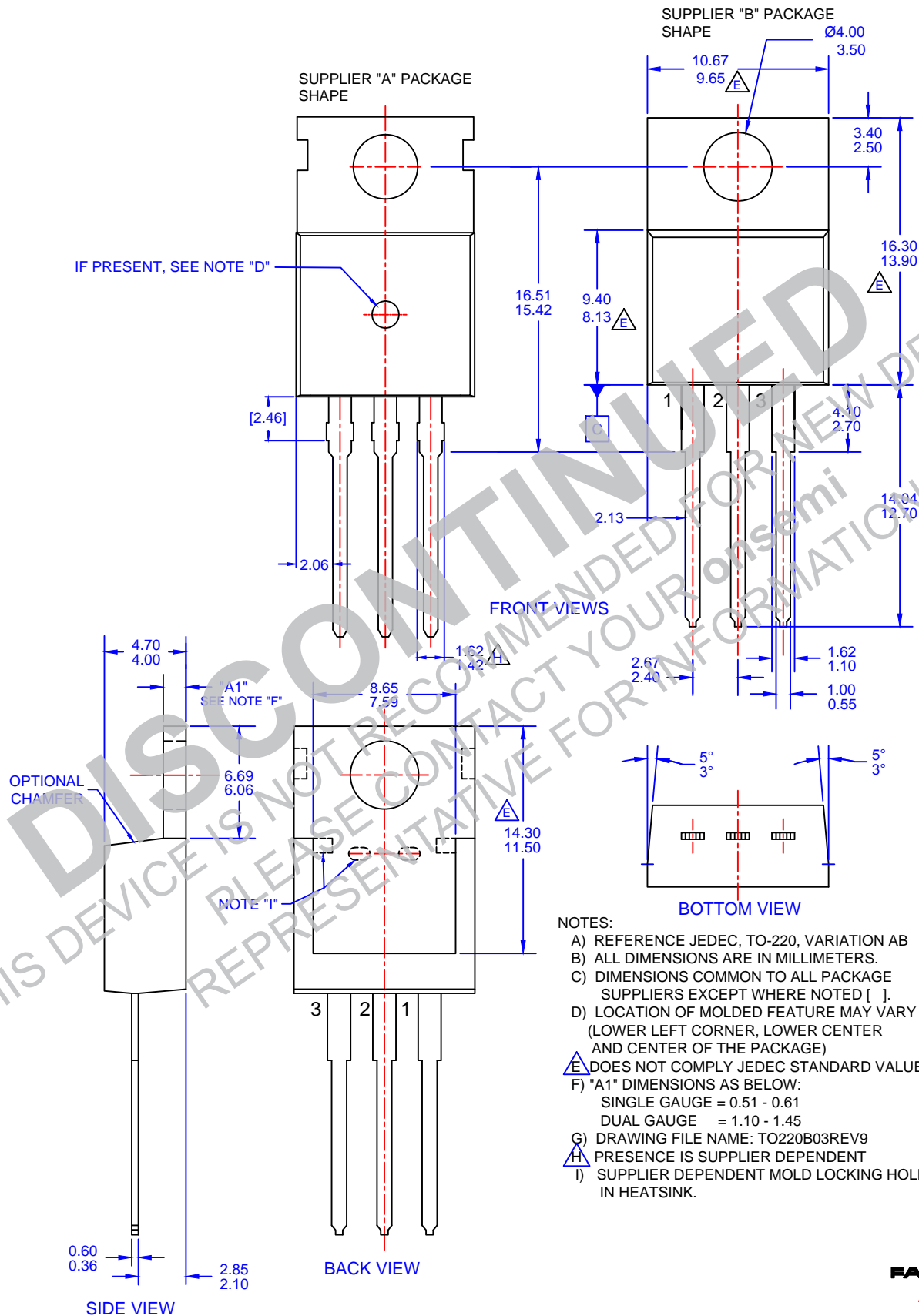


Figure 6. Power Derating




- NOTES:
- A) REFERENCE JEDEC, TO-220, VARIATION AB
 - B) ALL DIMENSIONS ARE IN MILLIMETERS.
 - C) DIMENSIONS COMMON TO ALL PACKAGE SUPPLIERS EXCEPT WHERE NOTED [].
 - D) LOCATION OF MOLDED FEATURE MAY VARY (LOWER LEFT CORNER, LOWER CENTER AND CENTER OF THE PACKAGE)
 - E) DOES NOT COMPLY JEDEC STANDARD VALUE.
 - F) "A1" DIMENSIONS AS BELOW:
 SINGLE GAUGE = 0.51 - 0.61
 DUAL GAUGE = 1.10 - 1.45
 - G) DRAWING FILE NAME: TO220B03REV9
 - H) PRESENCE IS SUPPLIER DEPENDENT
 - I) SUPPLIER DEPENDENT MOLD LOCKING HOLES IN HEATSINK.



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