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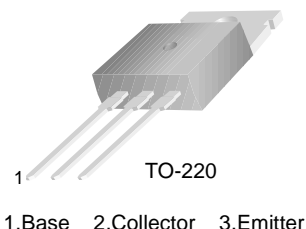


KSA614

KSA614

Low Frequency Power Amplifier Power Regulator

- Collector-Base Voltage : $V_{CBO} = -80V$
- Collector Dissipation : $P_C = 25W$ ($T_C = 25^\circ C$)



PNP Epitaxial Silicon Transistor

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

Symbol	Parameter	Ratings	Units
V_{CBO}	Collector- Base Voltage	- 80	V
V_{CEO}	Collector- Emitter Voltage	- 55	V
V_{EBO}	Emitter- Base Voltage	- 5	V
I_C	Collector Current	- 3	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	$I_C = - 500\mu A, I_E = 0$	- 80			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C = - 10mA, I_B = 0$	- 55			V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_E = - 500\mu A, I_C = 0$	- 5			V
I_{CBO}	Collector Cut-off Current	$V_{CB} = - 50V, I_E = 0$			- 50	μA
h_{FE}	DC Current Gain	$V_{CE} = - 5V, I_C = - 0.5A$	40		240	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = - 1A, I_B = - 0.1A$		- 0.15	- 0.5	V

h_{FE} Classification

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

Typical Characteristics

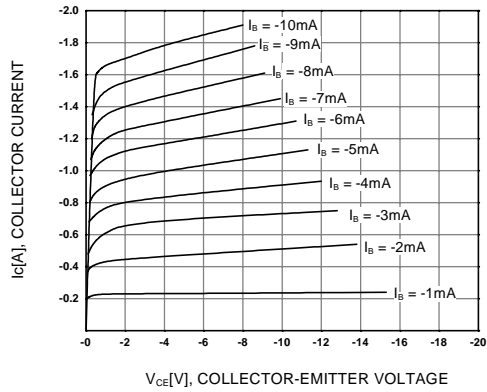


Figure 1. Static Characteristic

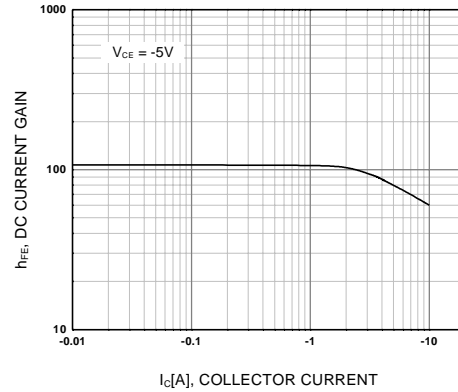


Figure 2. DC current Gain

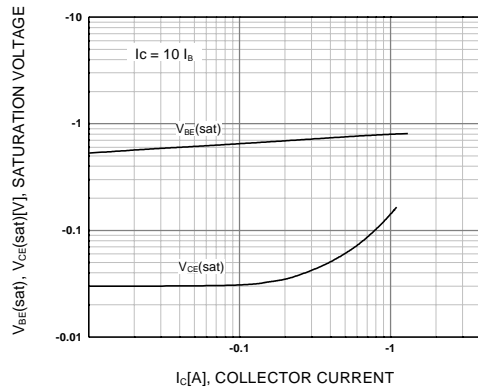


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

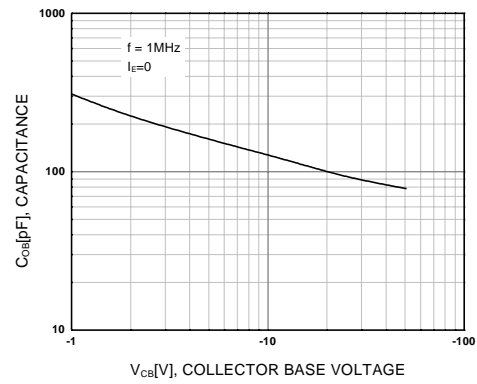


Figure 4. Collector Output Capacitance

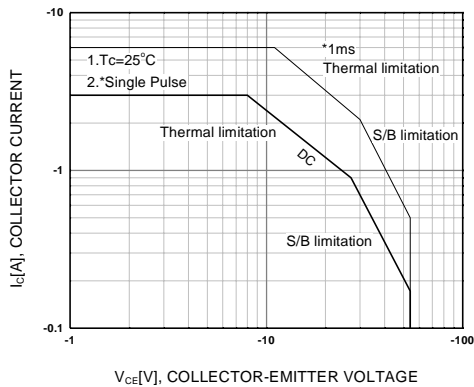


Figure 5. Safe Operating Area

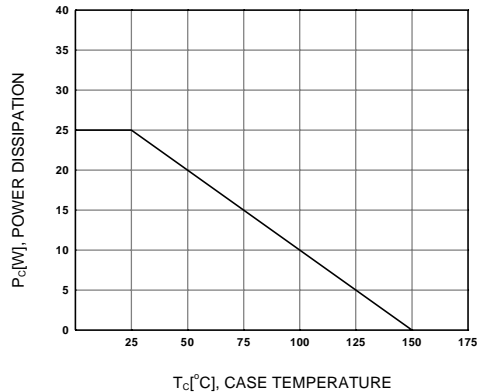
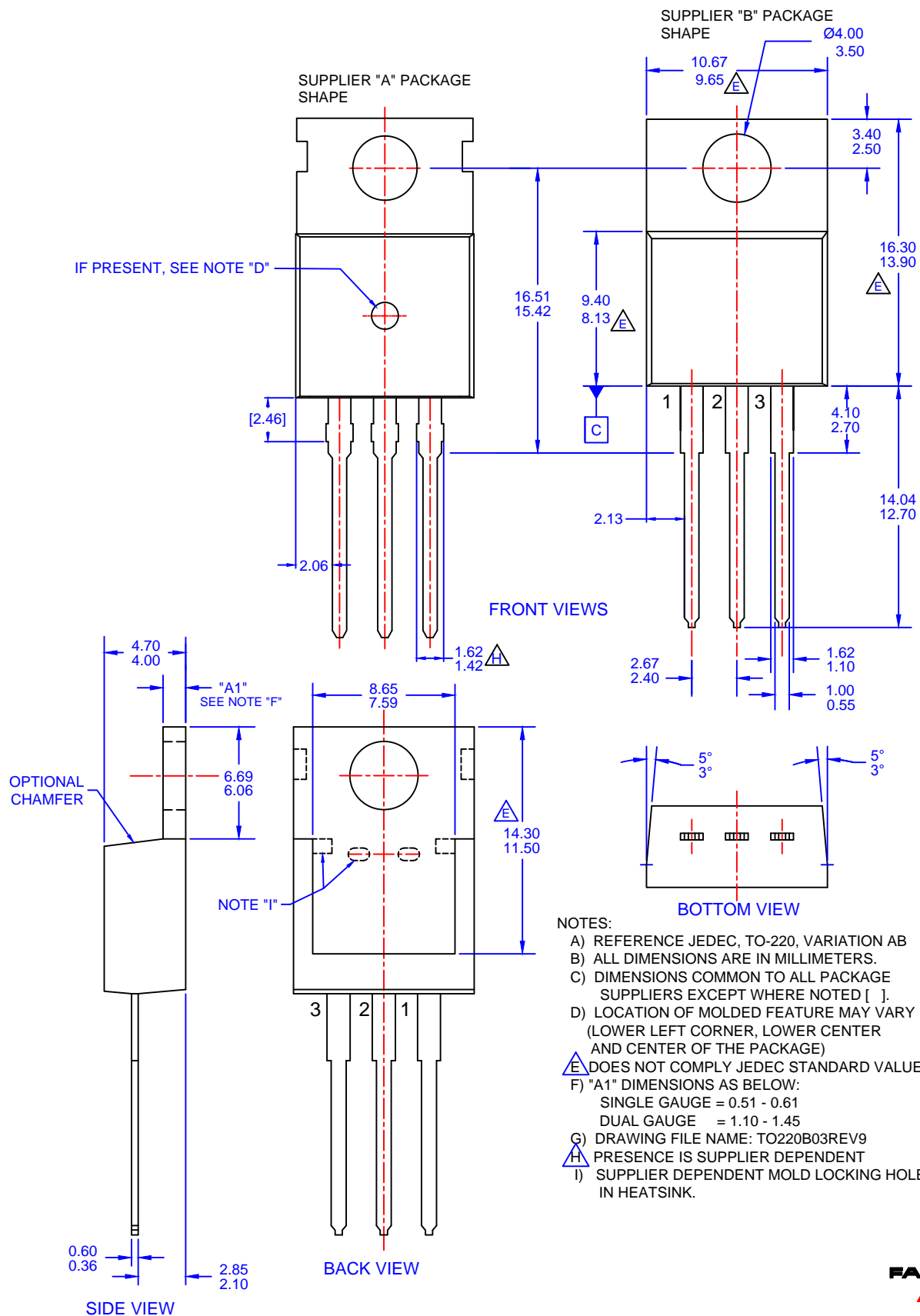


Figure 6. Power Derating



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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