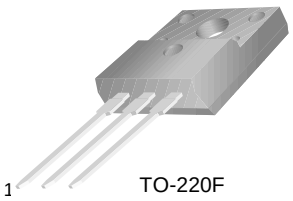
FAIRCHILD SEMICONDUCTOR™

KSB1366

LOW FREQUENCY POWER AMPLIFIER

- Complement to KSD2012



1 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	- 60	V
V_{CEO}	Collector-Emitter Voltage	- 60	V
V_{EBO}	Emitter-Base Voltage	- 7	V
I_C	Collector Current(DC)	- 3	A
I_B	Base Current	- 0.5	A
P_C	Collector Dissipation (T_a=25°C)	2	W
P_C	Collector Dissipation (T_C=25°C)	25	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	- 55 ~ 150	°C

Electrical Characteristics T_C=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C = - 50mA, I_B = 0	- 60			V
I_{CBO}	Collector Cut-off Current	V_{CB} = - 60V, I_E = 0			- 100	μA
I_{EBO}	Emitter Cut-off Current	V_{EB} = - 7V, I_C = 0			- 100	μA
h_{FE1} h_{FE2}	DC Current Gain	V_{CE} = - 5V, I_C = - 0.5A V_{CE} = - 5V, I_C = - 3A	100 20		320	
V_{CE}(sat)	Collector-Emitter Saturation Voltage	I_C = - 2A, I_B = - 0.2A		- 0.5	- 1	V
V_{BE}(on)	Base-Emitter ON Voltage	V_{CE} = - 5V, I_C = - 0.5A		- 0.7	- 1	V
f_T	Current Gain Bandwidth Product	V_{CE} = - 5V, I_C = - 0.5A		9		MHz

h_{FE} Classification

Classification	Y	G
h_{FE1}	100 ~ 200	150 ~ 320

Typical Characteristics

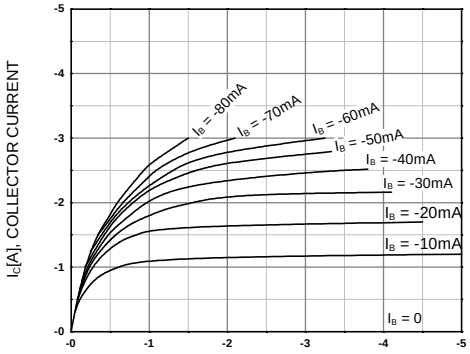


Figure 1. Static Characteristic

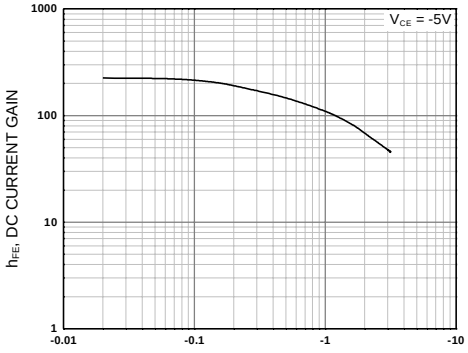


Figure 2. DC current Gain

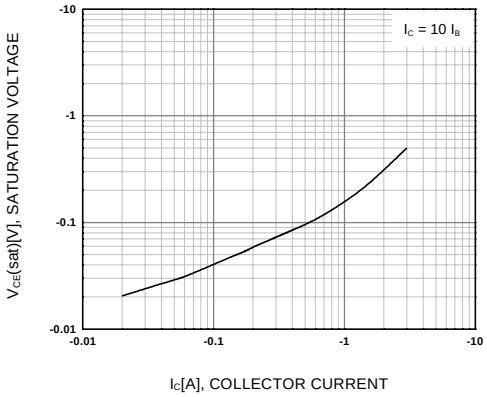


Figure 3. Collector-Emitter Saturation Voltage

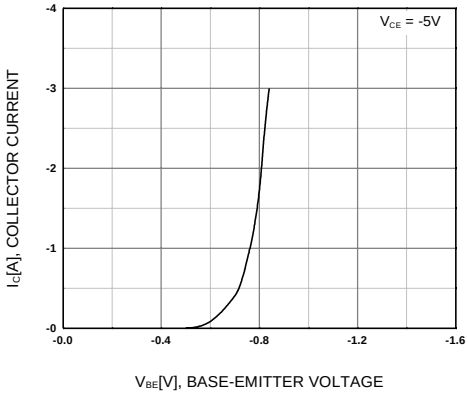


Figure 4. Base-Emitter On Voltage

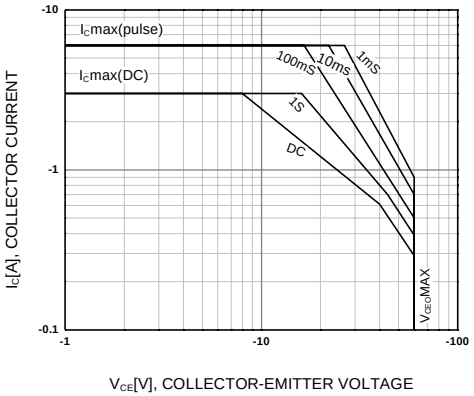


Figure 5. Safe Operating Area

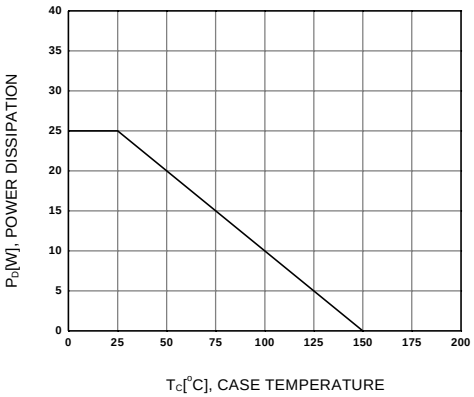
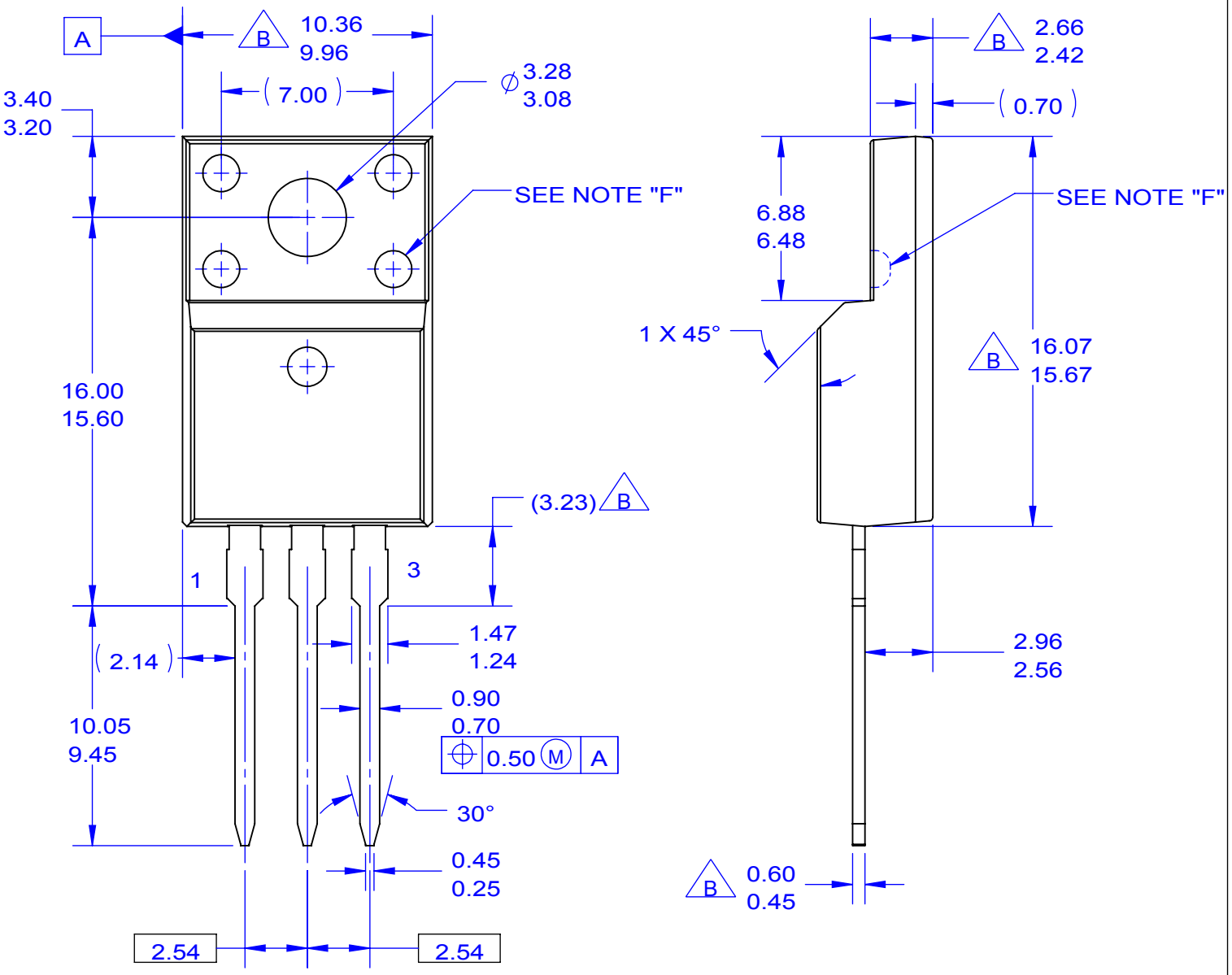
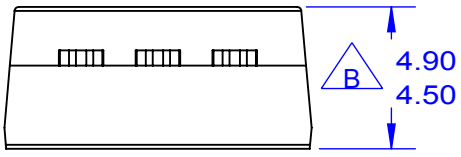


Figure 6. Power Derating





ON Semiconductor

NOTES:

A. EXCEPT WHERE NOTED CONFORMS TO EIAJ SC91A.
B DOES NOT COMPLY EIAJ STD. VALUE.
C. ALL DIMENSIONS ARE IN MILLIMETERS.
D. DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLD FLASH AND TIE BAR PROTRUSIONS.
E. DIMENSION AND TOLERANCE AS PER ASME Y14.5-1994.
F. OPTION 1 - WITH SUPPORT PIN HOLE.
OPTION 2 - NO SUPPORT PIN HOLE.
G. DRAWING FILE NAME: TO220M03REV5

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