

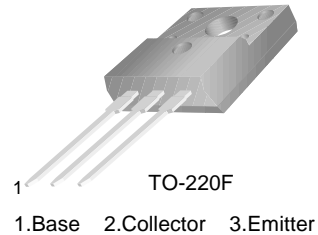


KSB1366

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LOW FREQUENCY POWER AMPLIFIER

- Complement to KSD2012



PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings $T_C=25^{\circ}\text{C}$ 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 ($T_a=25^{\circ}\text{C}$)	2	W
P_C	Collector Dissipation ($T_C=25^{\circ}\text{C}$)	25	W
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{STG}	Storage Temperature	- 55 ~ 150	$^{\circ}\text{C}$

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

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

h_{FE} Classification

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

Typical Characteristics

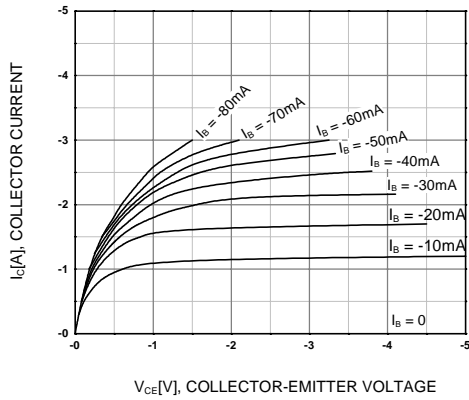


Figure 1. Static Characteristic

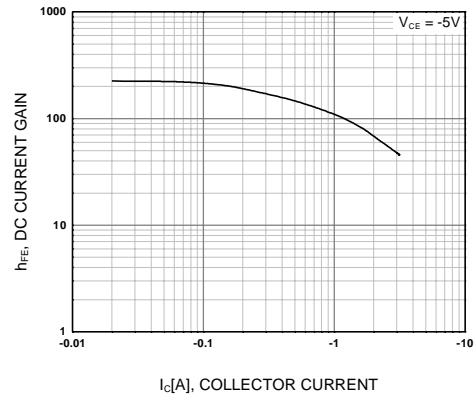


Figure 2. DC current Gain

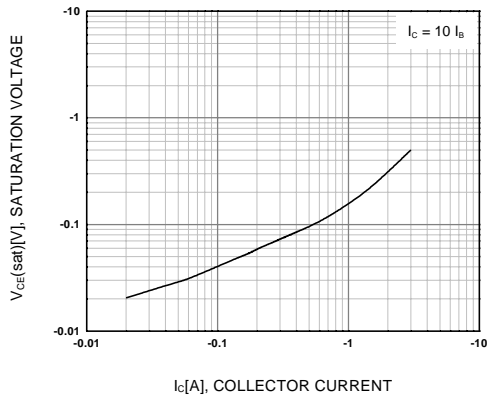


Figure 3. Collector-Emitter Saturation Voltage

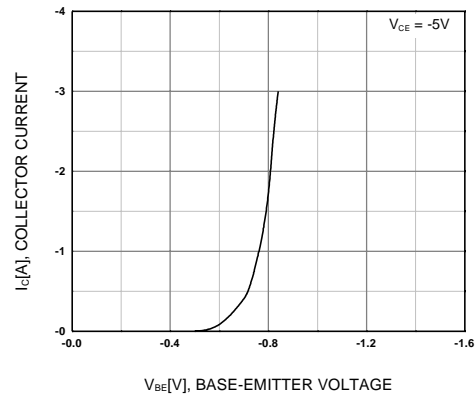


Figure 4. Base-Emitter On Voltage

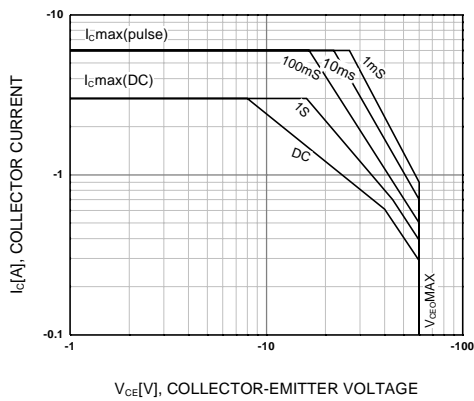


Figure 5. Safe Operating Area

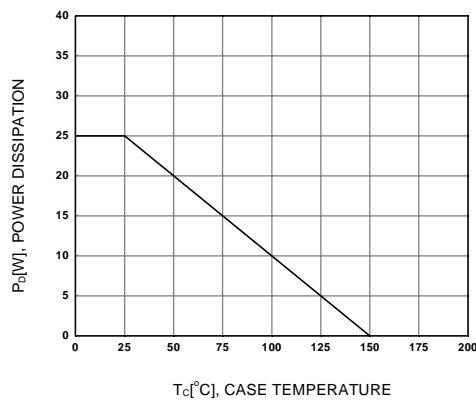


Figure 6. Power Derating



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