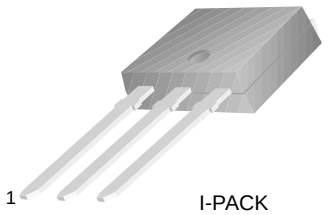
FAIRCHILD
SEMICONDUCTOR TM

KSA1243

Power Amplifier Applications

- Complement to KSC3073



I-PACK

1. Base 2. Collector 3. Emitter

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Ratings	Units
V_{CBO}	Collector-Base Voltage	- 30	V
V_{CEO}	Collector-Emitter Voltage	- 30	V
V_{EBO}	Emitter-Base Voltage	- 5	V
I_B	Base Current	- 0.6	A
I_C	Collector Current	- 3	A
P_C	Collector Dissipation (T_a=25°C)	1	W
P_C	Collector Dissipation (T_C=25°C)	10	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 = - 10mA, I_B = 0	- 30			V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E = - 1mA, I_C = 0	- 5			V
I_{CBO}	Collector Cut-off Current	V_{CB} = - 20V, I_E = 0			- 1	µA
I_{EBO}	Emitter Cut-off Current	V_{EB} = - 5V, I_C = 0			- 1	µA
h_{FE1} h_{FE2}	DC Current Gain	V_{CE} = - 2V, I_C = - 0.5A V_{CE} = - 2V, I_C = - 2.5A	70 25		240	
V_{CE}(sat)	Collector-Emitter Saturation Voltage	I_C = - 2A, I_B = - 0.2A		- 0.3	- 0.8	V
V_{BE}(on)	Base-Emitter ON Voltage	V_{CE} = - 2V, I_C = - 0.5A		- 0.75	- 1	V
f_T	Current Gain Bandwidth Product	V_{CE} = - 2V, I_C = - 0.5A		100		MHz
C_{ob}	Output Capacitance	V_{CB} = - 10V, f = 1MHz		40		pF

h_{FE} Classification

Classification	O	Y
h_{FE1}	70 ~ 140	120 ~ 240

Typical Characteristics

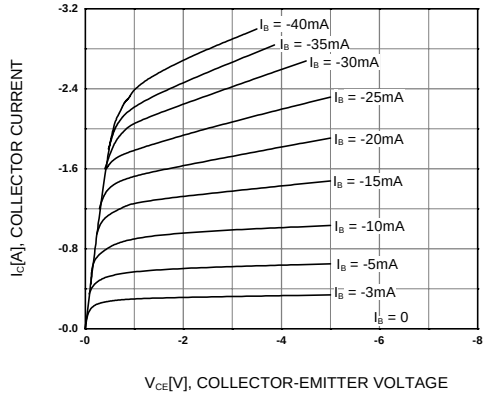


Figure 1. Static Characteristic

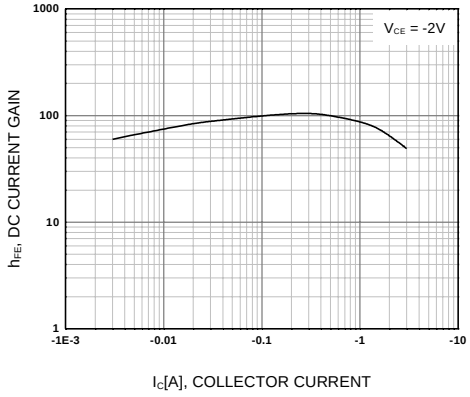


Figure 2. DC current Gain

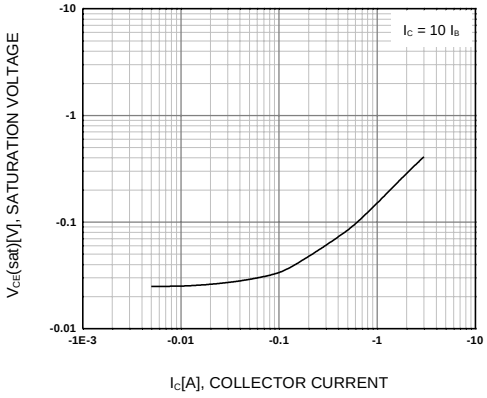


Figure 3. Collector-Emitter Saturation Votlage

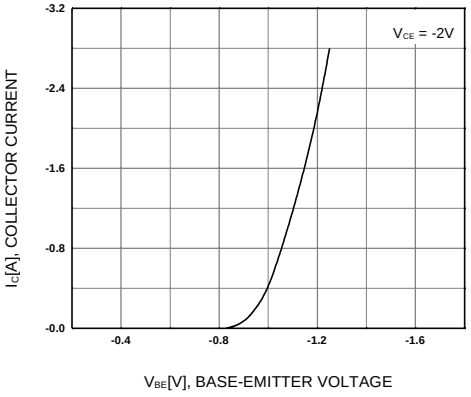


Figure 4. Base-Emitter On Voltage

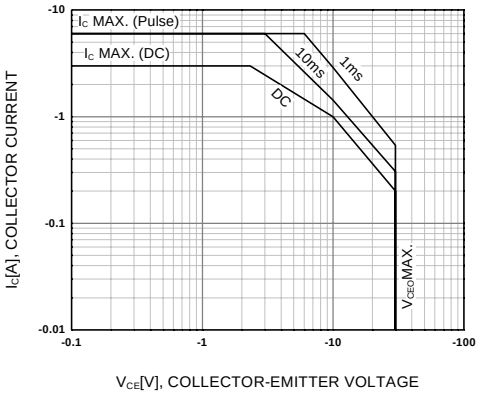


Figure 5. Safe Operating Area

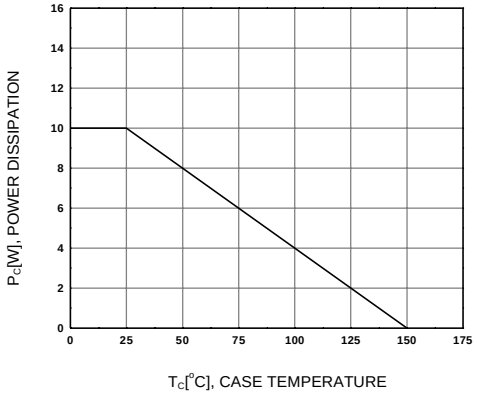
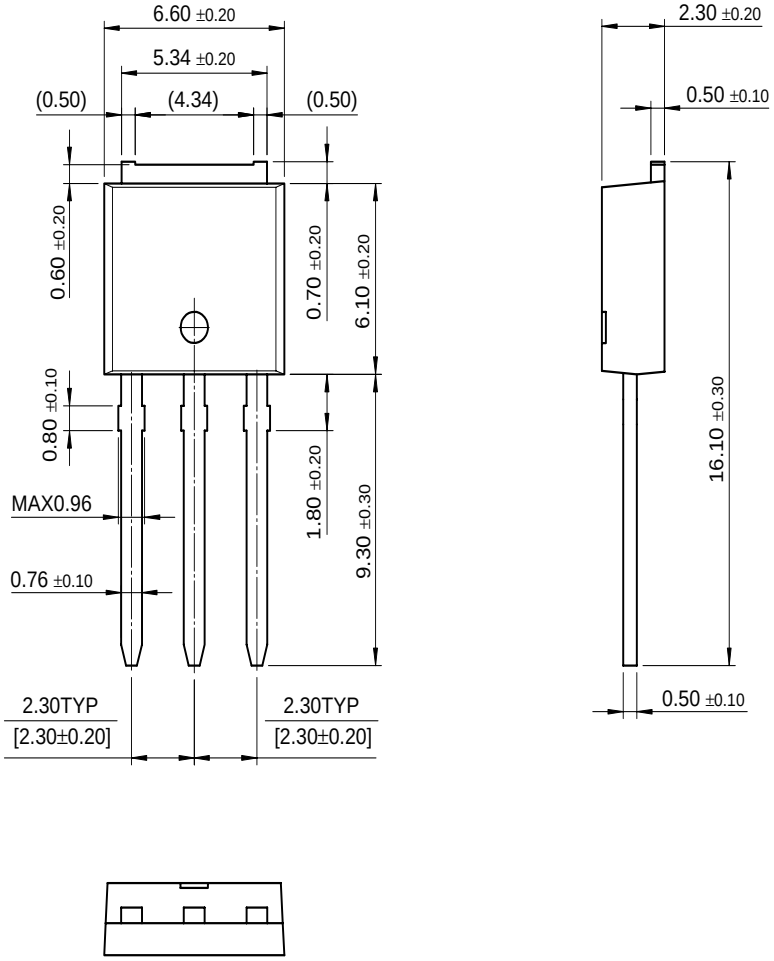


Figure 6. Power Derating

Package Demensions

I-PAK



Dimensions in Millimeters

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