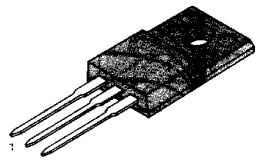
KSB1015 PNP EPITAXIAL SILICON TRANSISTOR

LOW FREQUENCY POWER AMPLIFIER

- Low Collector Emitter Saturation Voltage
- Complement to KSD1406

TO-220F



1. Base 2. Collector 3. Emitter

ABSOLUTE MAXIMUM RATINGS

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

ELECTRICAL CHARACTERISTICS (T_C =25°C)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Emitter Breakdown Voltage	BV_{CEO}	I_C = - 50mA, I_B = 0	- 60			V
Collector Cutoff Current	I_{CBO}	V_{CB} = - 60V, I_E = 0			- 100	μA
Emitter Cutoff Current	I_{EBO}	V_{EB} = - 7V, I_C = 0			- 100	μA
DC Current Gain	h_{FE1}	V_{CE} = - 5V, I_C = - 0.5A	60		200	
	h_{FE2}	V_{CE} = - 5V, I_C = - 3A	20			
Collector Emitter Saturation Voltage	V_{CE}(sat)	I_C = - 3A, I_B = - 0.3A		- 0.5	- 1	V
Base Emitter On Voltage	V_{BE}(on)	V_{CE} = - 5V, I_C = - 0.5A		- 0.7	- 1	V
Current Gain Bandwidth Product	f_T	V_{CE} = - 5V, I_C = - 0.5A		9		MHz
Output Capacitance	C_{OB}	V_{CB} = - 10V, f = 1MHz		150		pF
Turn On Time	t_{ON}	- I_B1 = I_B2 = 0.2A		0.4		μs
Storage Time	t_{STG}	V_{CC} = - 30V		1.7		μs
Fall Time	t_F			0.5		μs

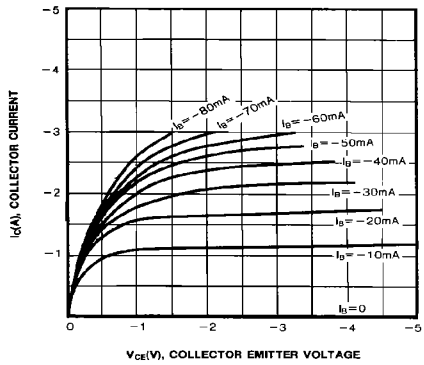
h_{FE}(1) CLASSIFICATION

Classification	O	Y
h_{FE1}	60 ~ 120	100 ~ 200

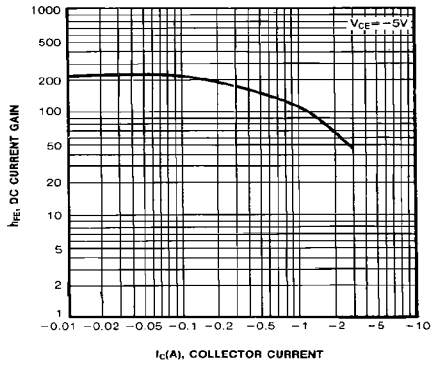
Rev. B

FAIRCHILD SEMICONDUCTOR TM

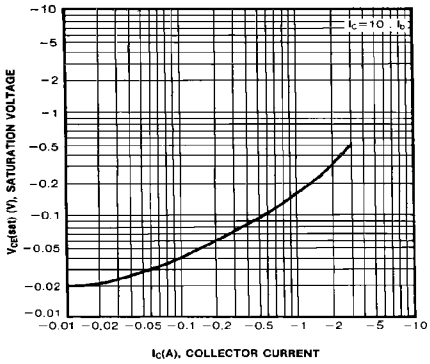
STATIC CHARACTERISTIC



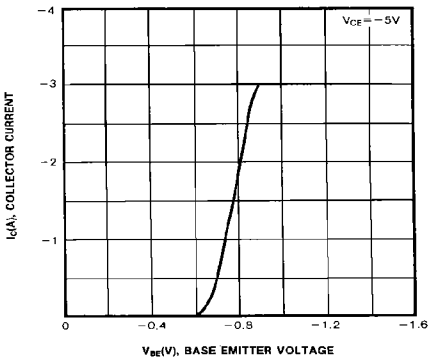
DC CURRENT GAIN



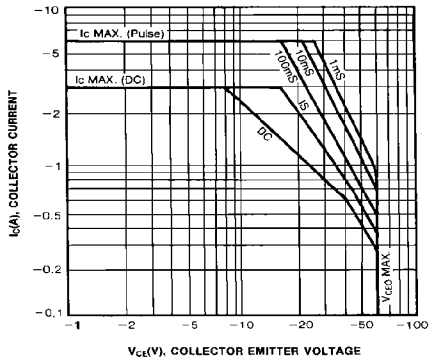
COLLECTOR EMITTER SATURATION VOLTAGE



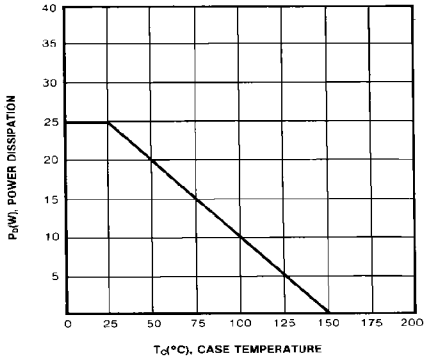
BASE EMITTER ON VOLTAGE



SAFE OPERATING AREA



POWER DERATING



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