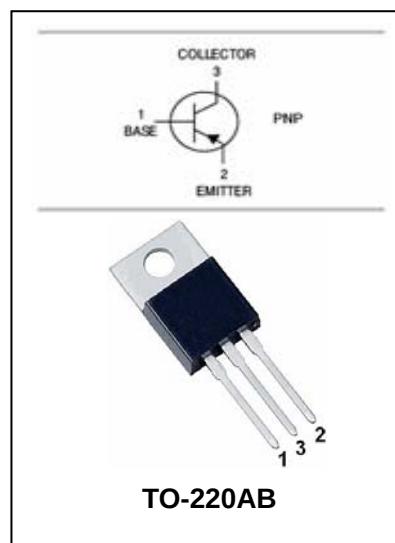


PNP Epitaxial Silicon Transistor

2SB834

FEATURES

- Low Collector-Emitter Saturation Voltage.
 $V_{CE(sat)}=1V(Max)@I_C=3A, I_B=0.3A.$
- DC Current Gain
 $H_{FE}=60-200@I_C=0.5A.$
- Complementary to PNP 2SD880.



MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	Value	Unit
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	-3 -6	A
	Continuous Peak		
I_B	Base Current	-0.5	A
P_C	Collector Dissipation	1.5	W
T_j, T_{stg}	Junction and Storage Temperature	-55 to +150	°C



PNP Epitaxial Silicon Transistor

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ELECTRICAL CHARACTERISTICS Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -1mA, I_E = 0$	-60		V
Collector-emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -50mA, I_B = 0$	-60		V
Emitter-base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -1mA, I_C = 0$	-7		V
Collector Cut-off Current	I_{CBO}	$V_{CB} = -60V, I_E = 0$		-100	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -7V, I_C = 0$		-100	μA
DC Current Gain	h_{FE}	$V_{CE} = -5V, I_C = -0.5A$ $V_{CE} = -5V, I_C = -3A$	60 20	200	
Collector-emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -3A, I_B = -0.3A$		-1	V
Base-emitter On Voltage	$V_{BE(on)}$	$I_C = -0.5A, V_{CE} = -5V$		-1	V
Transition Frequency	f_T	$V_{CE} = -5V, I_E = -0.5A$ $f = 1MHz$	5		MHz
Turn-on Time	t_{on}	$V_{CC} = 30V, I_C = 2A$ $I_{B1} = I_{B2} = 200mA$ $PW = 20\mu s$		0.7	μs
Storage Time	t_s			2	μs
Fall Time	t_f			0.9	μs

CLASSIFICATION OF h_{FE}

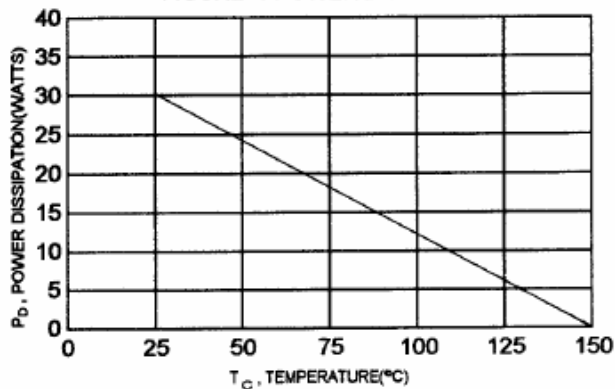
Range	O	Y
Marking	60-120	100-200

PNP Epitaxial Silicon Transistor

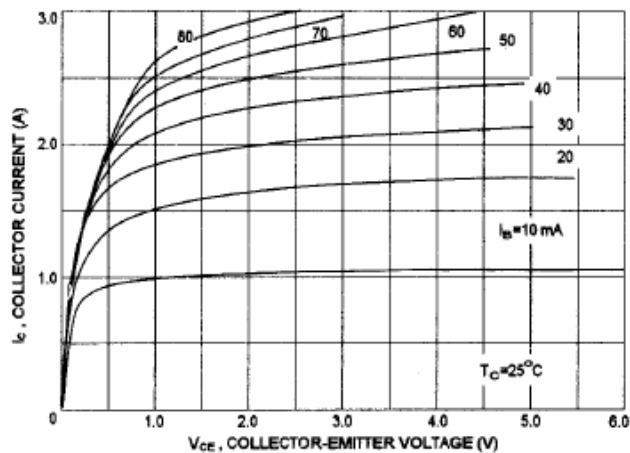
2SB834

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

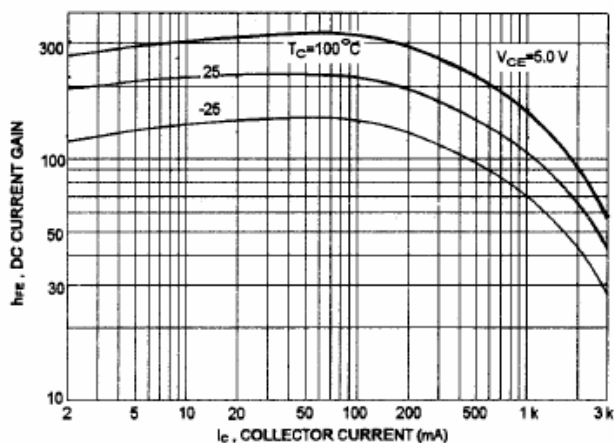
FIGURE -1 POWER DERATING



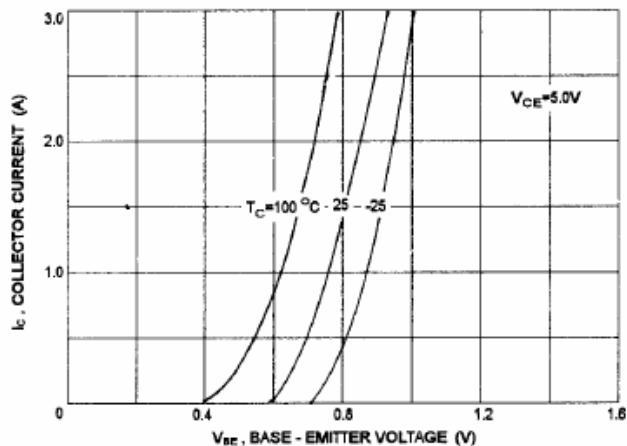
$I_C - V_{CE}$



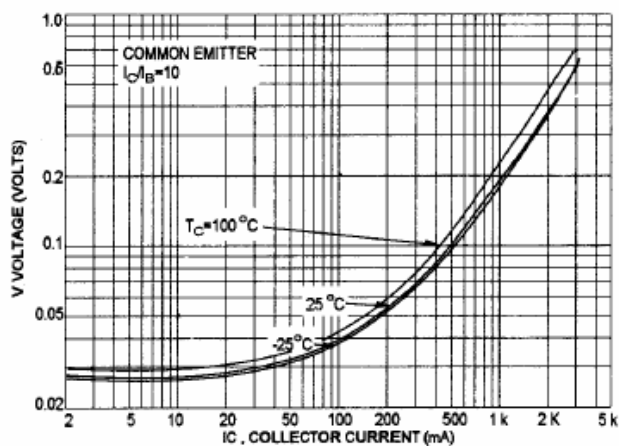
DC CURRENT GAIN



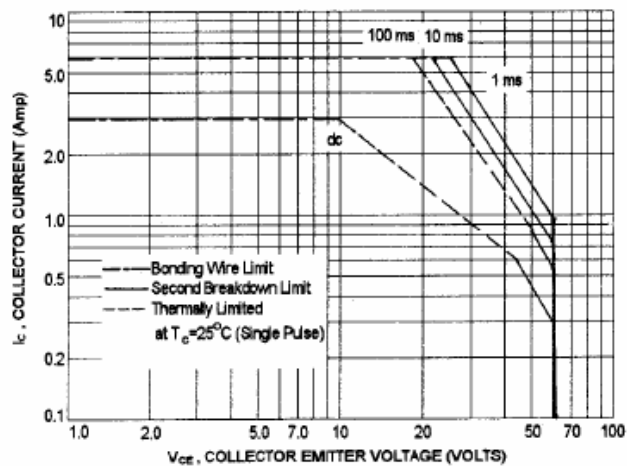
$I_C - V_{BE}$



$V_{CE(sat)} - I_C$



ACTIVE-REGION SAFE OPERATING AREA (SOA)





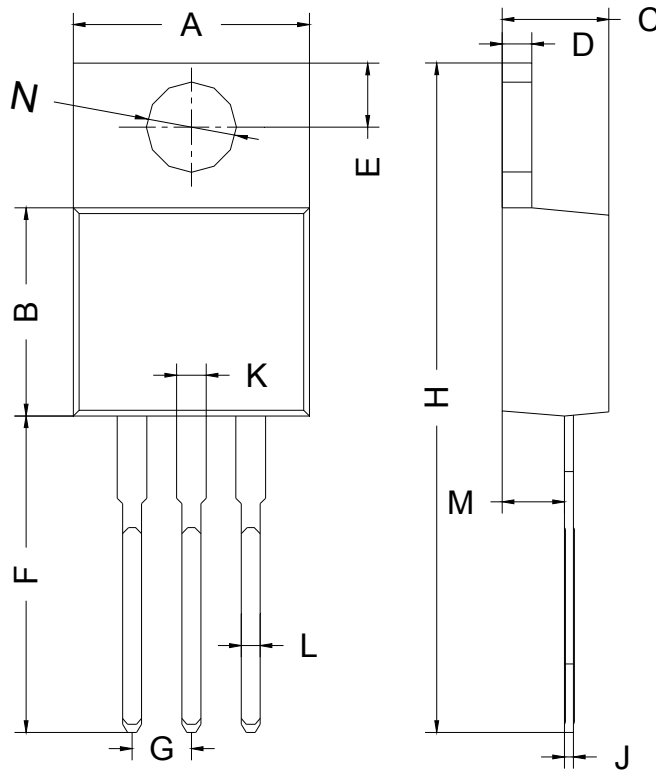
PNP Epitaxial Silicon Transistor

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PACKAGE OUTLINE

Plastic surface mounted package

TO-220AB



TO-220AB		
Dim	Min	Max
A	9.80	10.30
B	8.70	9.10
C	4.57 Typical	
D	1.27 Typical	
E	2.64	2.84
F	13.14	13.74
G	2.44	2.64
H	28.03	28.83
J	0.38 Typical	
K	1.22	1.32
L	0.71	0.91
M	2.50 Typical	
N	3.86 Typical	
All Dimensions in mm		