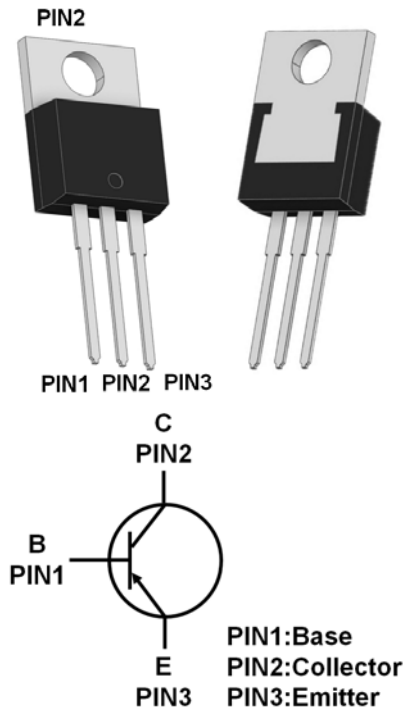


PNP High Power Transistors



Features

- Epoxy Meets UL 94 V-0 Flammability Rating
- High Current Switching Applications
- Low Collector Saturation Voltage

Applications

- Breakdown Voltage High
- Low Frequency Power Amplifier

Mechanical Data

- Package: TO-220AB
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Unit Weight: 1.9g

■ Maximum Ratings (Ta=25°C unless otherwise noted)

Item	Symbol	Unit	Value
Device marking code			2SB1185-E
Collector-base voltage	V_{CBO}	V	-60
Collector-emitter voltage	V_{CEO}	V	-50
Emitter-base voltage	V_{EBO}	V	-5
Collector current	I_C	A	-3
Power dissipation	P_D	W	2
Thermal resistance, junction-to-ambient (Note1)	R_{thJA}	°C/W	62.5
Thermal resistance, junction-to-case(Note1)	R_{thJC}	°C/W	50
Junction temperature	T_j	°C	-55 to +150
Storage temperature	T_{STG}	°C	-55 to +150

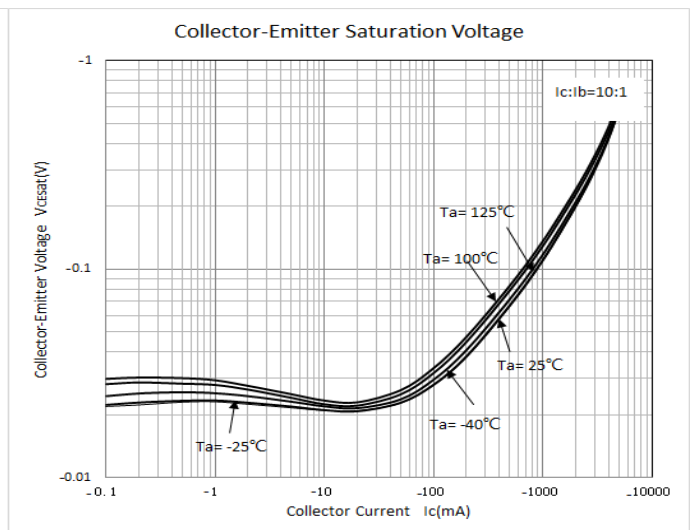
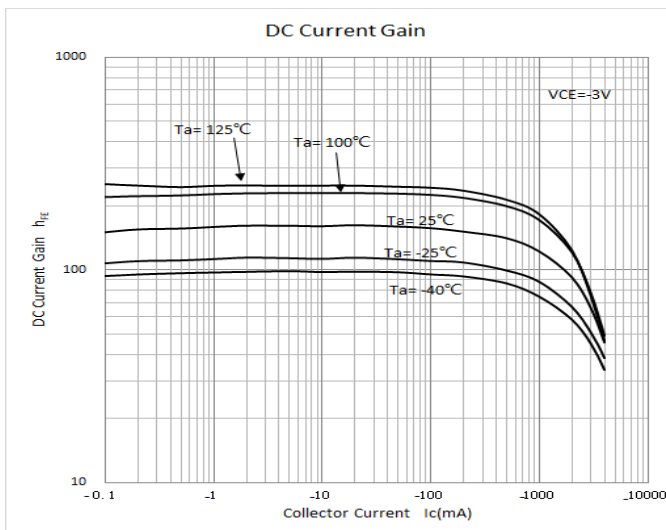
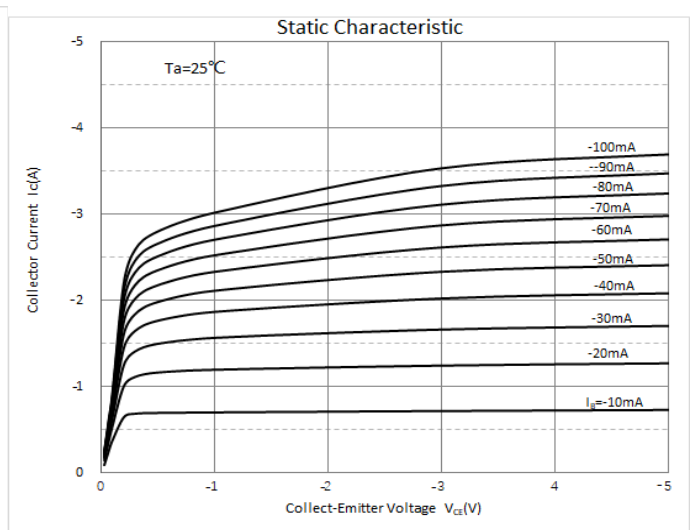
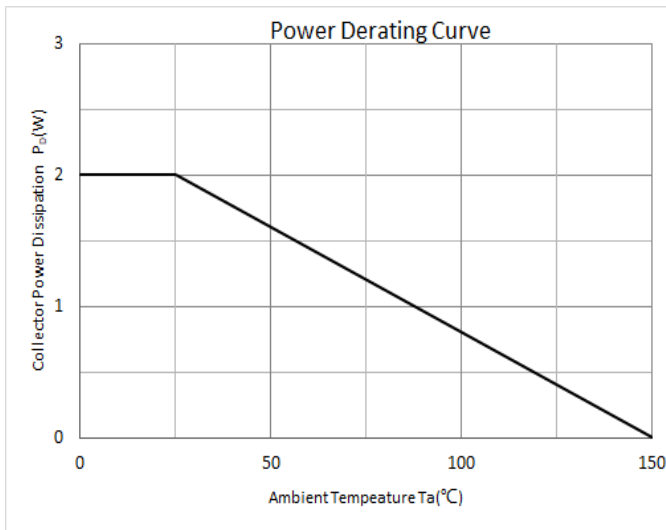
Note1: Device mounted on PCB with minimum recommended pad layout and additional heat sink (25mm x 23mm x 15mm) attached.

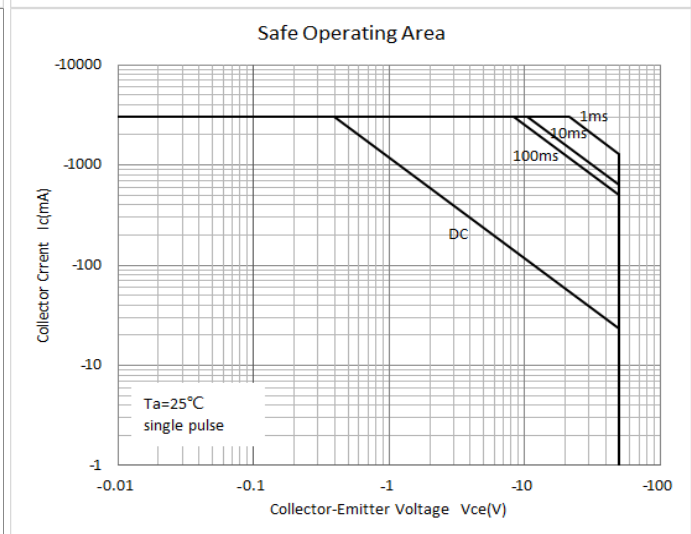
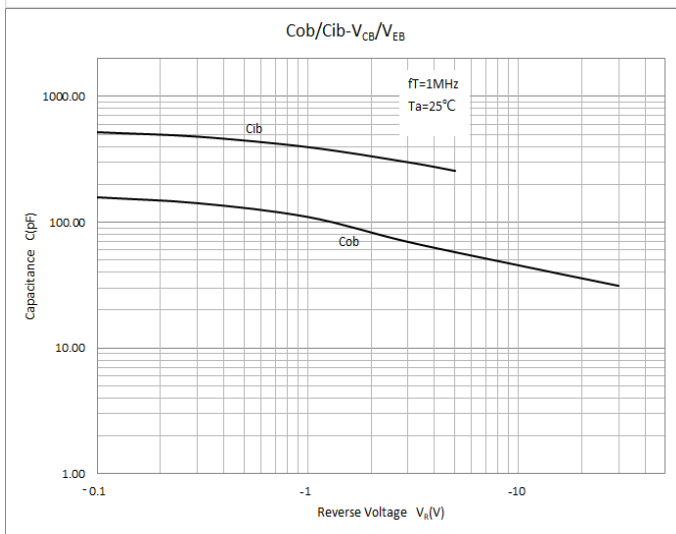
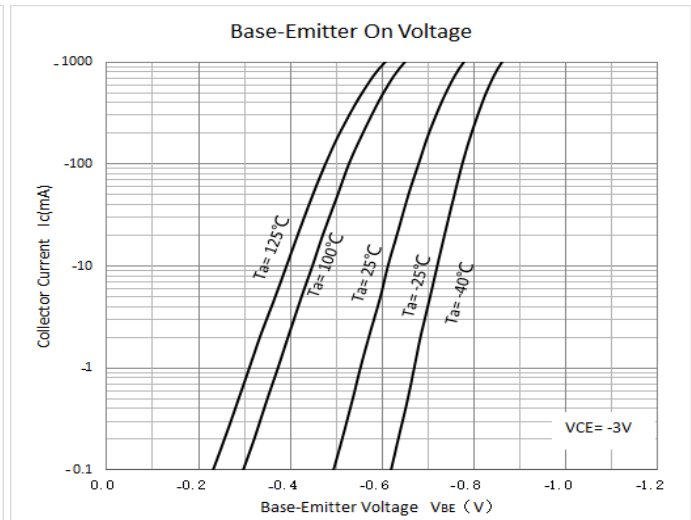
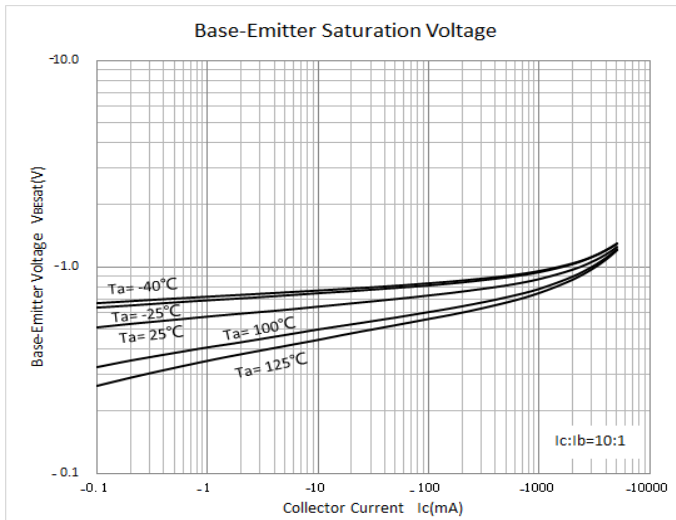


■ Electrical Characteristics (Ta=25°C unless otherwise noted)

Item	Symbol	Unit	Conditions	Min	Typ	Max
Collector-base breakdown voltage	$V_{(BR)CBO}$	V	$I_C = -50\mu A, I_E = 0$	-60		
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	V	$I_C = -1mA, I_B = 0$	-50		
Emitter-base breakdown voltage	$V_{(BR)EBO}$	V	$I_E = -50\mu A, I_C = 0$	-5		
Collector-base cut-off current	I_{CBO}	μA	$V_{CB} = -40V$			-1
Emitter-base cut-off current	I_{EBO}	μA	$V_{EB} = -4V$			-1
DC current gain	h_{FE}		$V_{CE} = -3V, I_C = -0.5A$	100		200
Collector-emitter saturation voltage	$V_{CE(sat)}$	V	$I_C = -2A, I_B = -200mA$			-1
Base-emitter saturation voltage	$V_{BE(sat)}$	V	$I_C = -2A, I_B = -200mA$			-1.5
Collector-base output capacitance	C_{ob}	pF	$V_{CB} = -10V, I_E = 0A, f = 1MHz$		50	

■ Characteristics(Typical)



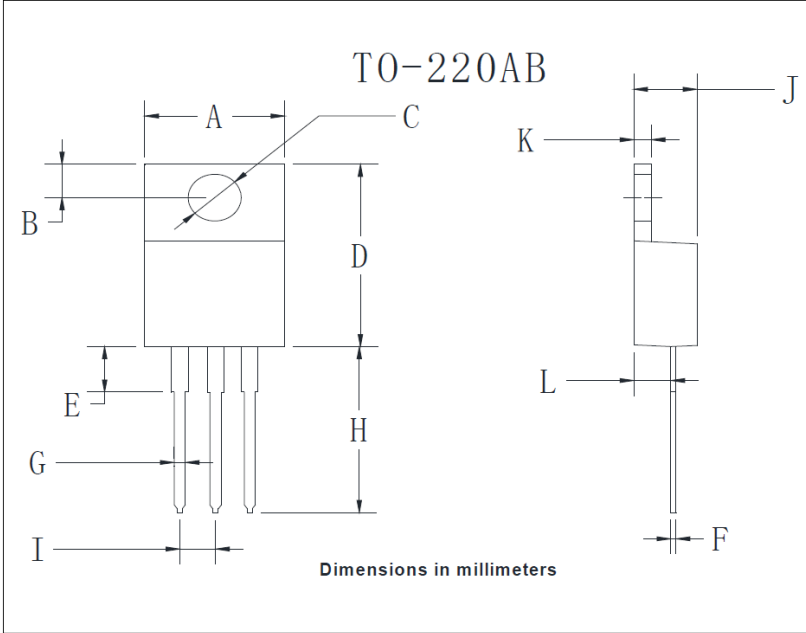




■ Ordering Information (Example)

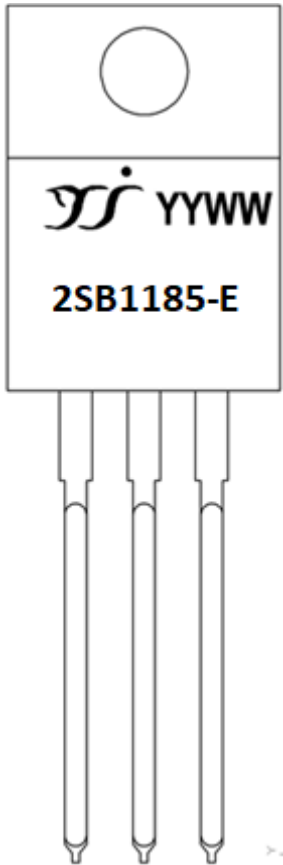
PREFERED P/N	PACKING CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
2SB1185-E	B1	50/Tube	1000	5000	Tube

■ TO-220AB Package information



TO-220AB		
Dim	Min	Max
A	9.95	10.35
B	2.55	2.95
C	3.8	4.0
D	14.95	15.25
E	3.75	4.25
F	0.26	0.5
G	0.68	0.94
H	13.4	13.9
I	2.35	2.65
J	4.38	4.78
K	1.14	1.4
L	2.37	2.79

■ Marking code



YangJie LOGO
YYWW: YY, years; WW , week.
For example,24 represents 2024; 01 represents the first week of this year.
2SB1185-E: Product model.



Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with automotive electronics, are not designed for use in medical, life-saving, lifesustaining, or military. Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.