

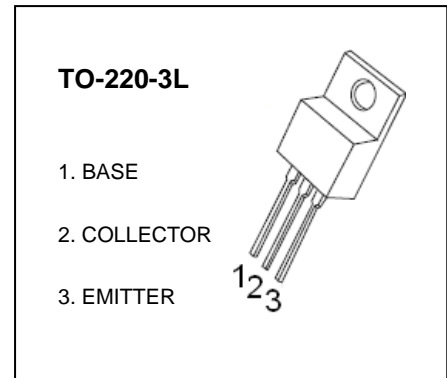
2SB1185 TRANSISTOR (PNP)

FEATURES

- Low Collector Saturation Voltage
- Complement to Type 2SD1762

APPLICATIONS

- For Use in Low Frequency Power Amplifier Applications



MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-3	A
P_C	Collector Power Dissipation	2	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	63	$^{\circ}\text{C}/\text{W}$
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

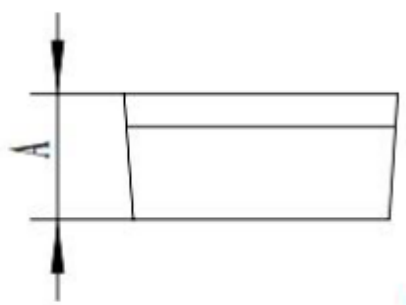
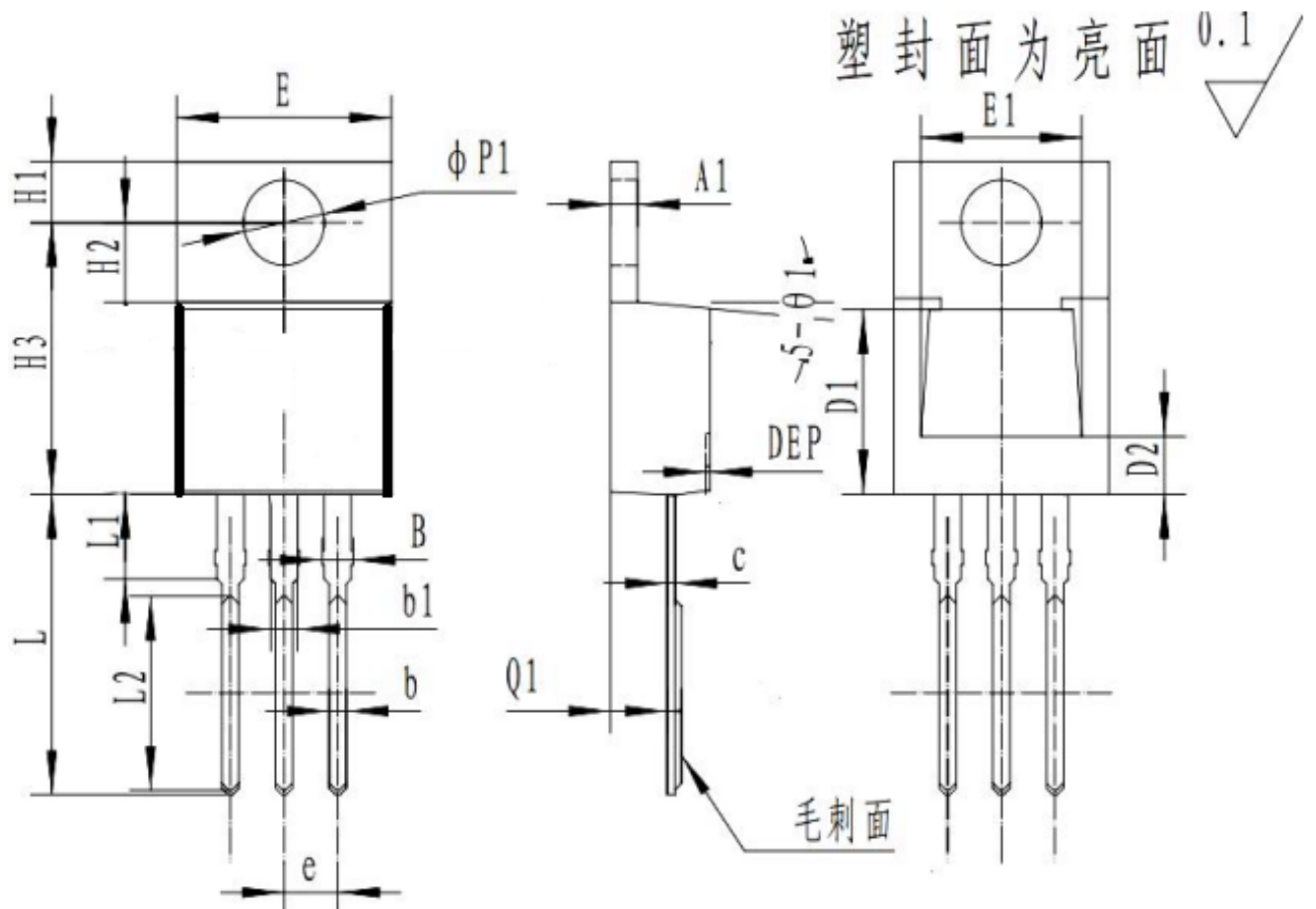
ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-50\mu\text{A}, I_E=0$	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}, I_B=0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-50\mu\text{A}, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-40\text{V}, I_E=0$			-1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-4\text{V}, I_C=0$			-1	μA
DC current gain	h_{FE}^*	$V_{CE}=-3\text{V}, I_C=-0.5\text{A}$	60		320	
Collector-emitter saturation voltage	$V_{CE(sat)}^*$	$I_C=-2\text{A}, I_B=-0.2\text{A}$			-1	V
Base-emitter saturation voltage	$V_{BE(sat)}^*$	$I_C=-2\text{A}, I_B=-0.2\text{A}$			-1.5	V
Collector output capacitance	C_{ob}	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$		50		pF
Transition frequency	f_T	$V_{CE}=-5\text{V}, I_C=-0.5\text{A}, f=30\text{MHz}$		70		MHz

*Pulse test

CLASSIFICATION OF h_{FE}

RANK	D	E	F
RANGE	60-120	100-200	160-320



SYMBOL	MM		
	MIN	NOM	MAX
*A	4.60	4.70	4.80
A1	1.22	1.27	1.32
*b	0.76	0.81	0.86
b1	1.22	1.27	1.32
*B	1.27	1.37	1.45
*c	0.33	0.38	0.43
D1	7.60	7.75	7.90
D2	2.50	2.60	2.70
*E	10.00	10.10	10.20
E1	7.70	7.80	7.90
H1	2.64	2.74	2.84
H2	3.46	3.56	3.66
*H3	12.10	12.20	12.30
H4	1.90	2.00	2.10
*e	2.49	2.54	2.59
*L	13.45	3.85	13.85
L1	3.58	3.78	3.98
L2	8.66	8.76	8.86
*Q1	2.59	2.69	2.79
$\theta 1$	3°	5°	7°
$\phi P1$	3.85	3.90	3.95
DEP	0.05	0.10	0.20

带*为检验尺寸