



TO-220-3L Plastic-Encapsulate Transistors

2SB1185 TRANSISTOR (PNP)

FEATURES

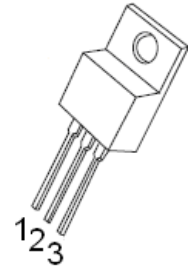
- Low Collector Saturation Voltage
- Complement to Type 2SD1762

APPLICATIONS

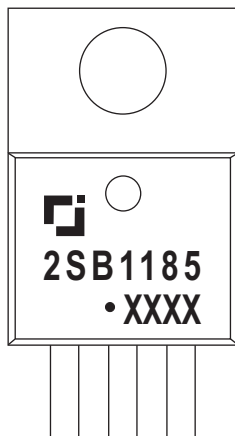
- For Use in Low Frequency Power Amplifier Applications

TO-220-3L

1. BASE
2. COLLECTOR
3. EMITTER

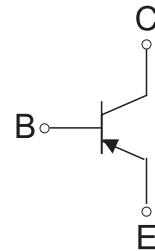


MARKING



2SB1185=Device code
Solid dot=Green moldinn compound device,
if none,the normal device
XXXX=Code

Equivalent Circuit



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	$^{\circ}\text{C/W}$
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

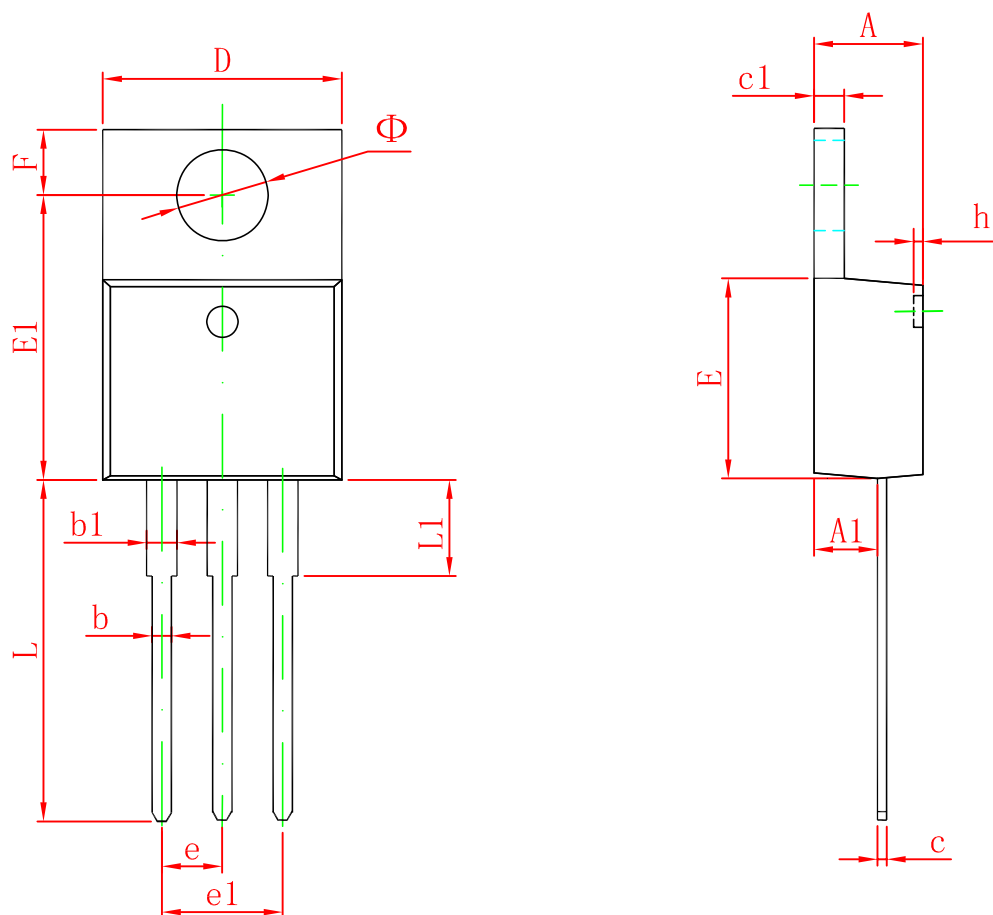
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-50μA, I _E =0	-60			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =-1mA, I _B =0	-50			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-50μA, I _C =0	-5			V
Collector cut-off current	I _{CBO}	V _{CB} =-40V, I _E =0			-1	μA
Emitter cut-off current	I _{EBO}	V _{EB} =-4V, I _C =0			-1	μA
DC current gain	h _{FE} [*]	V _{CE} =-3V, I _C =-0.5A	60		320	
Collector-emitter saturation voltage	V _{CE(sat)} [*]	I _C =-2A, I _B =-0.2A			-1	V
Base-emitter saturation voltage	V _{BE (sat)} [*]	I _C =-2A, I _B =-0.2A			-1.5	V
Collector output capacitance	C _{ob}	V _{CB} =-10V, I _E =0, f=1MHz		50		pF
Transition frequency	f _T	V _{CE} =-5V, I _C =-0.5A, f=30MHz		70		MHz

*Pulse test

CLASSIFICATION OF h_{FE}

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

TO-220-3L Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	4.470	4.670	0.176	0.184
A1	2.520	2.820	0.099	0.111
b	0.710	0.910	0.028	0.036
b1	1.170	1.370	0.046	0.054
c	0.310	0.530	0.012	0.021
c1	1.170	1.370	0.046	0.054
D	10.010	10.310	0.394	0.406
E	8.500	8.900	0.335	0.350
E1	12.060	12.460	0.475	0.491
e	2.540 TYP		0.100 TYP	
e1	4.980	5.180	0.196	0.204
F	2.590	2.890	0.102	0.114
h	0.000	0.300	0.000	0.012
L	13.400	13.800	0.528	0.543
L1	3.560	3.960	0.140	0.156
Φ	3.735	3.935	0.147	0.155