

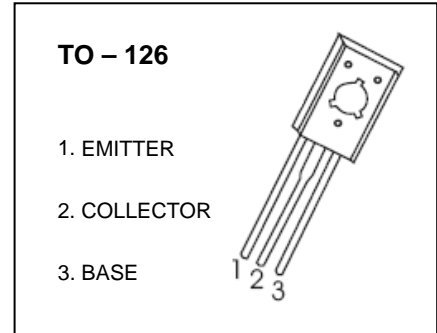


DONGGUAN NANJING ELECTRONICS LTD.,  
**TO-126 Plastic-Encapsulate Transistors**

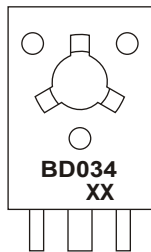
**BD034** TRANSISTOR (PNP)

**FEATURES**

- High Transition Frequency
- High Collector Current

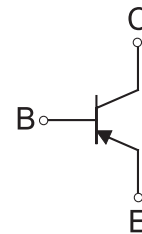


**MARKING**



BD034=Device code  
XX=Code

**Equivalent Circuit**



**ORDERING INFORMATION**

Part Number	Package	Packing Method	Pack Quantity
BD034	TO-126	Bulk	200pcs/Bag
BD034-TU	TO-126	Tube	60pcs/Tube

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

Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base Voltage	-110	V
$V_{CEO}$	Collector-Emitter Voltage	-95	V
$V_{EBO}$	Emitter-Base Voltage	-7	V
$I_C$	Collector Current	-2.5	A
$P_C$	Collector Power Dissipation	1.25	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	100	$^\circ\text{C/W}$
$T_J, T_{stg}$	Operation Junction and Storage Temperature Range	-55~+150	$^\circ\text{C}$

## ELECTRICAL CHARACTERISTICS

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}, I_E=0$	-110			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-10\text{mA}, I_B=0$	-95			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}, I_C=0$	-7			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=-100\text{V}, I_E=0$			-1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=-5\text{V}, I_C=0$			-1	$\mu\text{A}$
DC current gain	$h_{FE(1)}$	$V_{CE}=-2\text{V}, I_C=-100\text{mA}$	100		560	
	$h_{FE(2)}$	$V_{CE}=-2\text{V}, I_C=-1.5\text{A}$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-2\text{A}, I_B=-200\text{mA}$			-0.5	V
Base-emitter voltage	$V_{BE}$	$V_{CE}=-5\text{V}, I_C=-500\text{mA}$			-1	V
Transition frequency	$f_T$	$V_{CE}=-1\text{V}, I_C=-250\text{mA}, f=1\text{MHz}$	3			MHz

### CLASSIFICATION OF $h_{FE(1)}$

RANK	R	S	T	U
RANGE	100-200	140-280	200-400	280-560

# TO-126 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	2.500	2.900	0.098	0.114
A1	1.100	1.500	0.043	0.059
b	0.660	0.860	0.026	0.034
b1	1.170	1.370	0.046	0.054
c	0.450	0.600	0.018	0.024
D	7.400	7.800	0.291	0.307
E	10.600	11.000	0.417	0.433
e	2.290 TYP		0.090 TYP	
e1	4.480	4.680	0.176	0.184
h	0.000	0.300	0.000	0.012
L	15.300	15.700	0.602	0.618
L1	2.100	2.300	0.083	0.091
P	3.900	4.100	0.154	0.161
$\phi$	3.000	3.200	0.118	0.126