



JIANGSU CHANGJING ELECTRONICS TECHNOLOGY CO., LTD

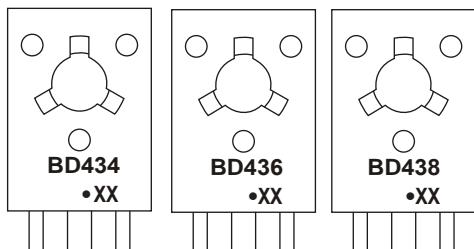
TO-126 Plastic-Encapsulate Transistors

BD434 / BD436 / BD438 TRANSISTOR (PNP)

FEATURES

- Amplifier and Switching Applications
- Complement To BD433, BD435 And BD437

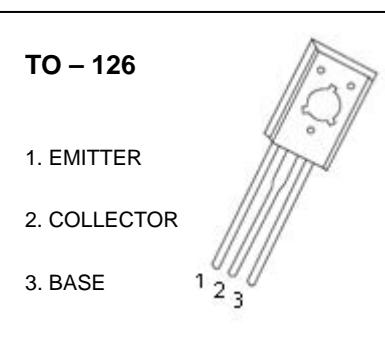
MARKING



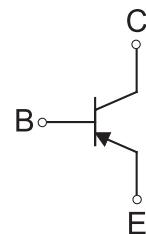
BD434,BD436,BD438=Device code

Solid dot = Green molding compound
device, if none, the normal device

XX=Code



Equivalent Circuit



ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
BD434	TO-126	Bulk	200pcs/Bag
BD436	TO-126	Bulk	200pcs/Bag
BD438	TO-126	Bulk	200pcs/Bag
BD434-TU	TO-126	Tube	60pcs/Tube
BD436-TU	TO-126	Tube	60pcs/Tube
BD438-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	BD434	-22
		BD436	-32
		BD438	-45
V_{CEO}	Collector-Emitter Voltage	BD434	-22
		BD436	-32
		BD438	-45
V_{EBO}	Emitter-Base Voltage	-5	V
I_c	Collector Current –Continuous	-4	A
P_c	Collector Power Dissipation	1.25	W
T_J, T_{stg}	Junction Temperature	-55-150	°C

ELECTRICAL CHARACTERISTICS

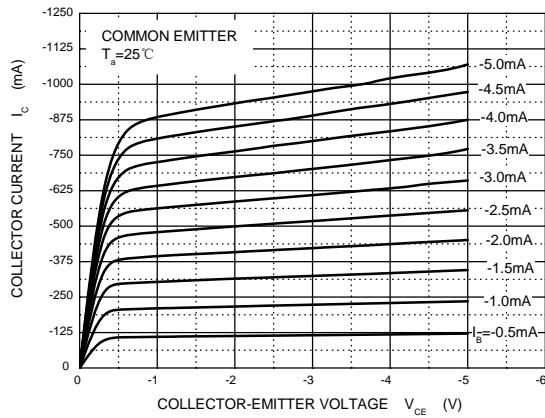
$T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(\text{BR})\text{CBO}}$	$I_C=-100\mu\text{A}, I_E=0$ BD434 BD436 BD438	-22 -32 -45			V
Collector-emitter breakdown voltage	$V_{\text{CE}(\text{SUS})}^{(1)}$	$I_C=-100\text{mA}, I_B=0$ BD434 BD436 BD438	-22 -32 -45			V
Emitter-base breakdown voltage	$V_{(\text{BR})\text{EBO}}$	$I_E=-100\mu\text{A}, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{\text{CB}}=-22\text{V}, I_E=0$ $V_{\text{CB}}=-32\text{V}, I_E=0$ $V_{\text{CB}}=-45\text{V}, I_E=0$ BD434 BD436 BD438			-100	μA
Emitter cut-off current	I_{EBO}	$V_{\text{EB}}=-5\text{V}, I_E=0$			-1	mA
DC current gain	$h_{FE(1)}^{(1)}$	$V_{\text{CE}}=-1\text{V}, I_C=-500\text{mA}$	85		375	
	$h_{FE(2)}^{(1)}$	$V_{\text{CE}}=-5\text{V}, I_C=-10\text{mA}$ BD434/BD436 BD438	40 30			
	$h_{FE(3)}^{(1)}$	$V_{\text{CE}}=-1\text{V}, I_C=-2\text{A}$ BD434/BD436 BD438	50 40			
Collector-emitter saturation voltage	$V_{\text{CE}(\text{sat})}^{(1)}$	$I_C=-2\text{A}, I_B=-0.2\text{A}$ BD434/BD436			-0.5	V
		$I_C=-3\text{A}, I_B=-0.3\text{A}$ BD438			-0.7	
Base-emitter voltage	$V_{\text{BE}}^{(1)}$	$V_{\text{CE}}=-1\text{V}, I_C=-2\text{A}$ BD434/BD436 BD438			-1.1 -1.2	V
Transition frequency	f_T	$V_{\text{CE}}=-1\text{V}, I_C=-250\text{mA}$	3			MHz

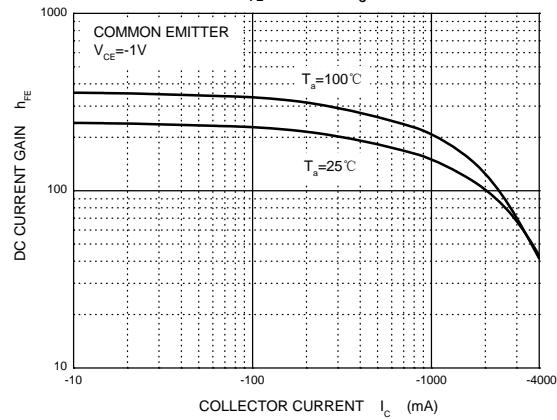
⁽¹⁾Pulse test.

Typical Characteristics

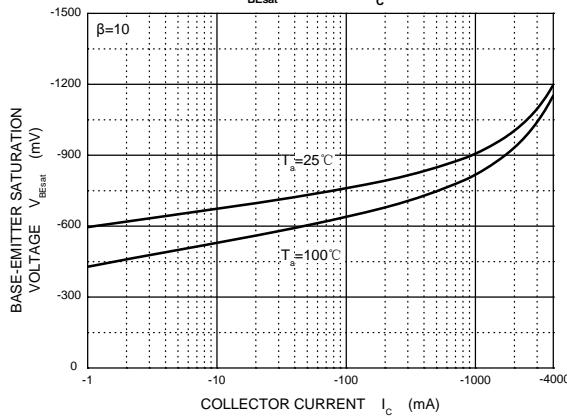
Static Characteristic



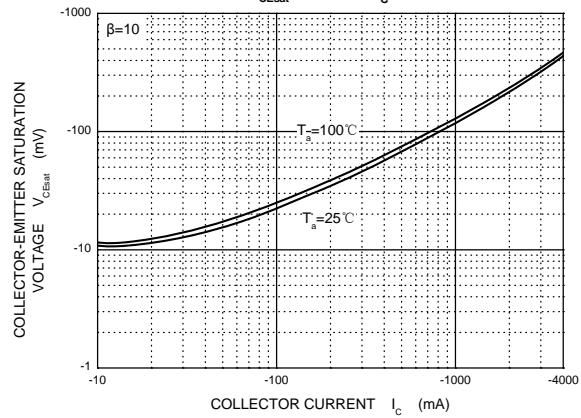
h_{FE} — I_c



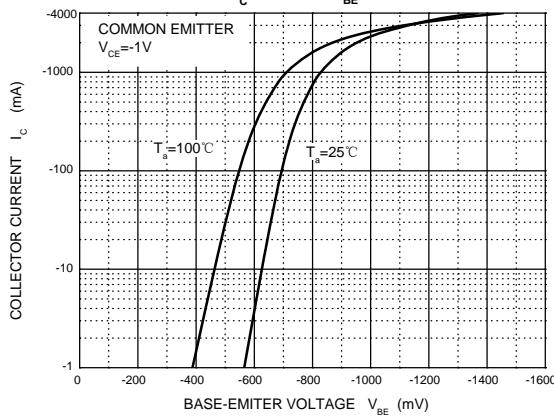
V_{BEsat} — I_c



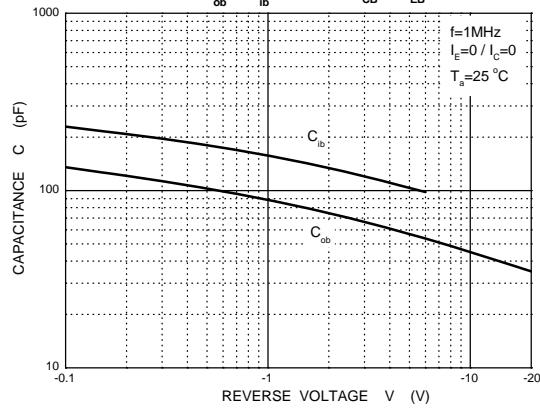
V_{CEsat} — I_c



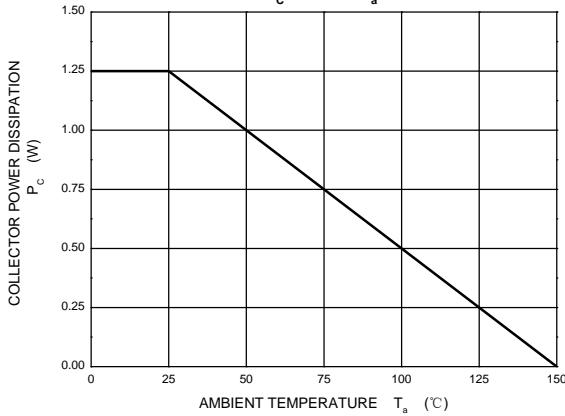
I_c — V_{BE}



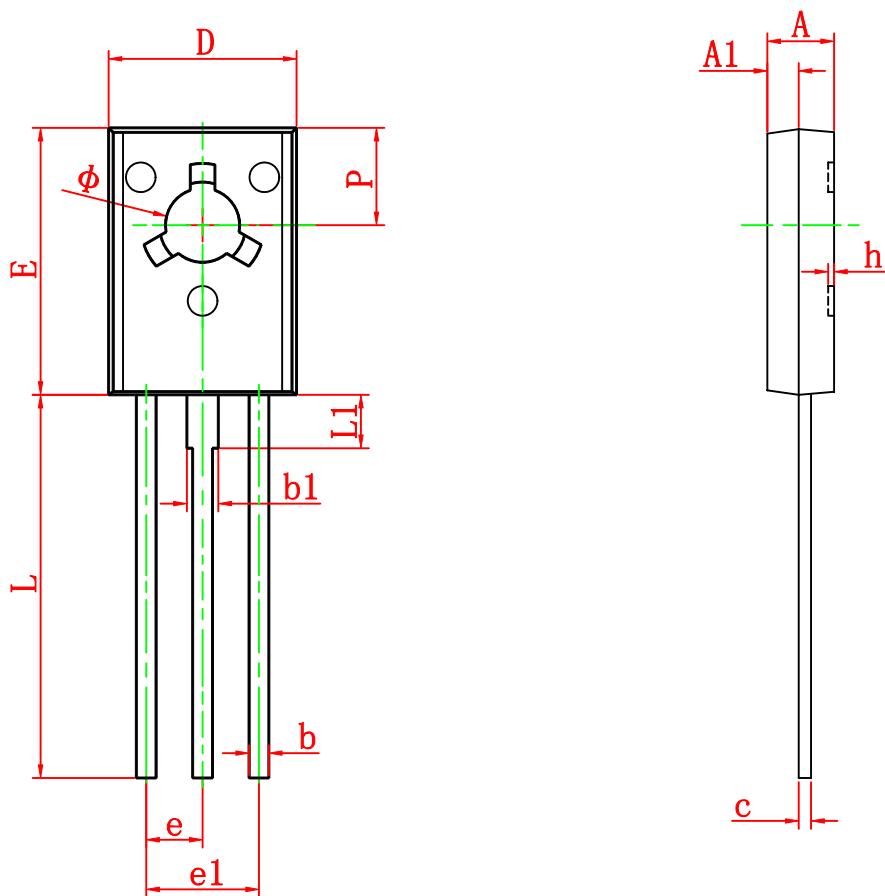
C_{ob} / C_{ib} — V_{CB} / V_{EB}



P_c — T_a



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
Φ	3.000	3.200	0.118	0.126

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Bipolar Transistors - BJT category:

Click to view products by Changjing Electronics Technology manufacturer:

Other Similar products are found below :

[619691C](#) [MCH4017-TL-H](#) [MMBT-2369-TR](#) [BC546/116](#) [BC557/116](#) [BSW67A](#) [NJVMJD148T4G](#) [NTE123AP-10](#) [NTE153MCP](#) [NTE16](#)
[NTE195A](#) [NTE92](#) [C4460](#) [2N4401-A](#) [2N6728](#) [2SA1419T-TD-H](#) [2SA2126-E](#) [2SB1204S-TL-E](#) [2SC2712S-GR,LF](#) [2SC5488A-TL-H](#)
[2SD2150T100R](#) [SP000011176](#) [2N2907A](#) [2N3904-NS](#) [2N5769](#) [2SC2412KT146S](#) [2SD1816S-TL-E](#) [CPH6501-TL-E](#) [MCH4021-TL-E](#)
[MJE340](#) [US6T6TR](#) [NJK0281DG](#) [732314D](#) [CPH3121-TL-E](#) [CPH6021-TL-H](#) [873787E](#) [IMZ2AT108](#) [UMX21NTR](#) [MCH6102-TL-E](#)
[NJK0302DG](#) [2N3583](#) [30A02MH-TL-E](#) [NSV40301MZ4T1G](#) [NTE13](#) [NTE26](#) [NTE282](#) [NTE323](#) [NTE350](#) [NTE81](#) [STX83003-AP](#)