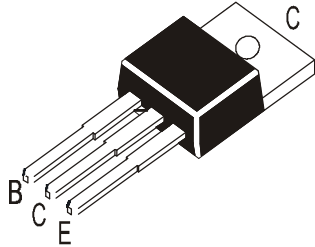


PLASTIC POWER TRANSISTORS

BD243, A, B, C NPN
BD244, A, B, C PNP



TO-220
Plastic Package

Complementary Silicon Transistors intended for a wide variety of Switching and Amplifier Applications, Series and Shunt Regulators, Driver and Output stages of Hi-Fi Amplifiers

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

DESCRIPTION	SYMBOL	BD243	BD243A	BD243B	BD243C	UNIT
		BD244	BD244A	BD244B	BD244C	
Collector Emitter Voltage	V _{CEO}	45	60	80	100	V
Collector Base Voltage	V _{CBO}	45	60	80	100	V
Emitter Base Voltage	V _{EBO}	5.0				V
Collector Current Continuous	I _C	6.0				A
Collector Current Peak	I _{CM}	10				A
Base Current	I _B	2.0				A
Power Dissipation upto T _c =25°C Derate above 25°C	P _D	65				W
		0.52				W/°C
Power Dissipation upto T _a =25°C Derate above 25°C	P _D	2.0				W
		16				mW/°C
Storage Temperature	T _{stg}	- 65 to +150				°C
Junction Temperature	T _j	150				°C

THERMAL RESISTANCE

Junction to Case	R _{th (j-c)}	1.92	°C/W
Junction to Ambient in free air	R _{th (j-a)}	62.5	°C/W

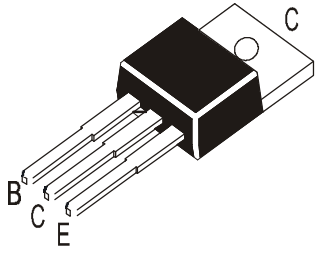
ELECTRICAL CHARACTERISTICS (T_c=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Collector Emitter (sus) Voltage	*V _{CEO(sus)}	I _C =30mA, I _B =0			
		BD243/BD244	45		V
		BD243A/BD244A	60		V
		BD243B/BD244B	80		V
		BD243C/BD244C	100		V
Collector Cut Off Current	I _{CEO}	V _{CE} =30V, I _B =0			
		BD243, A / BD244, A		0.7	mA
		V _{CE} =60V, I _B =0			
		BD243B, C/ BD244B, C		0.7	mA

PLASTIC POWER TRANSISTORS

BD243, A, B, C NPN
BD244, A, B, C PNP

TO-220
Plastic Package



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

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Collector Cut Off Current	I _{CES}	V _{CE} =V _{CEO} (max), V _{BE} =0		0.4	mA
Emitter Cut Off Current	I _{EBO}	V _{EB} =5V, I _C =0		1.0	mA
DC Current Gain	*h _{FE}	I _C =0.3A, V _{CE} =4V I _C =3A, V _{CE} =4V	30 15		
Collector Emitter Saturation Voltage	*V _{CE(sat)}	I _C =6A, I _B =1A		1.5	V
Base Emitter on Voltage	*V _{BE(on)}	I _C =6A, V _{CE} =4V		2.0	V

*Pulse Test : Pulse width ≤300ms, Duty Cycle ≤2%

DYNAMIC CHARACTERISTIC

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Small Signal Current Gain	h _{fe}	I _C =0.5A, V _{CE} =10V, f=1KHZ	20		
Transition Frequency	**f _T	I _C =0.5A, V _{CE} =10V, f=1MHz	3		MHz

SWITCHING CHARACTERISTICS

DESCRIPTION	SYMBOL	TEST CONDITION	TYP	UNIT
Turn On Time	t _{on}	V _{CC} =30V, I _C =6A, I _{B1} =I _{B2} =0.6A	0.3	μs
Turn Off Time	t _{off}		0.6	μs

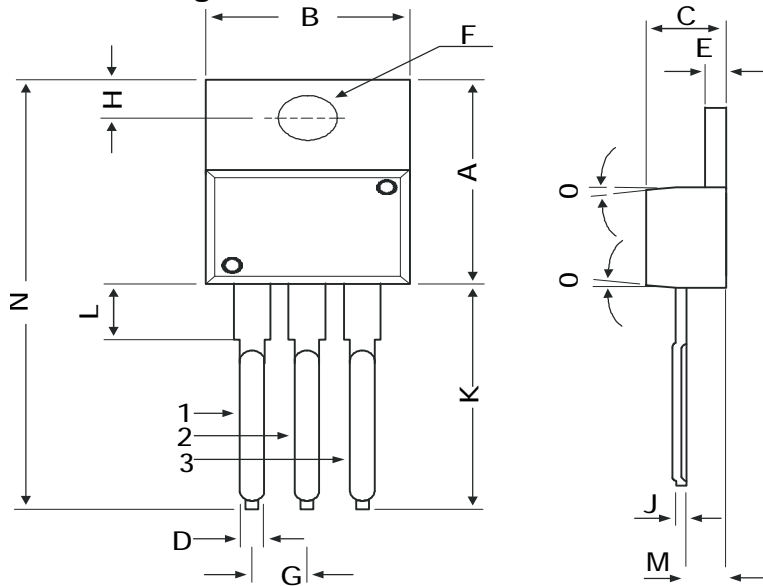
**f_T=/h_{fe}/* f_{test}

BD243_244Rev_1 301202E

BD243, A, B, C NPN
BD244, A, B, C PNP

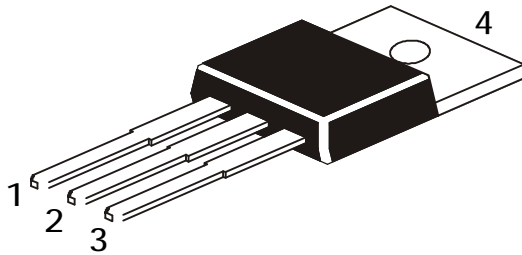
**TO-220
Plastic Package**

TO-220 Plastic Package



DIM	MIN	MAX
A	14.42	16.51
B	9.63	10.67
C	3.56	4.83
D	—	0.90
E	1.15	1.40
F	3.75	3.88
G	2.29	2.79
H	2.54	3.43
J	—	0.56
K	12.70	14.73
L	2.80	4.07
M	2.03	2.92
N	—	31.24
O	7 DEG	

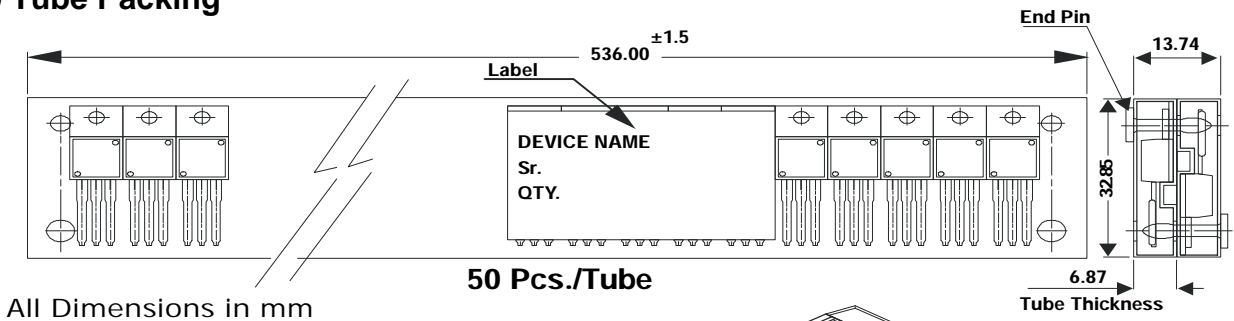
All diminsions in mm.



Pin Configuration

1. Base
2. Collector
3. Emitter
4. Collector

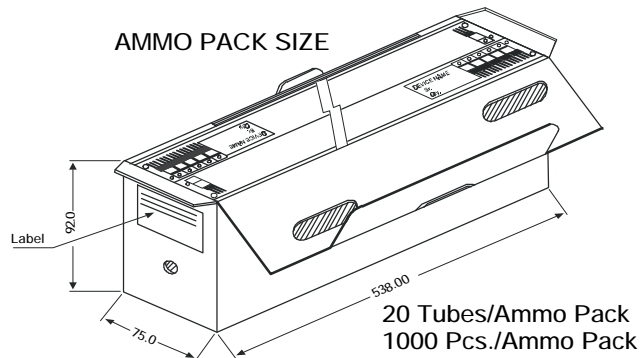
TO-220 Tube Packing



All Dimensions in mm

50 Pcs./Tube

AMMO PACK SIZE



Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-220	200 pcs/polybag	396 gm/200 pcs	3' x 7.5" x 7.5"	1.0K	17" x 15" x 13.5"	16.0K	36 kgs
	50 pcs/tube	120 gm/50 pcs	3.5" x 3.7" x 21.5"	1.0K	19" x 19" x 19"	10.0K	29 kgs

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.



CDIL is a registered Trademark of
Continental Device India Limited

C-120 Naraina Industrial Area, New Delhi 110 028, India.
Telephone + 91-11-2579 6150, 5141 1112 Fax + 91-11-2579 5290, 5141 1119
email@cdil.com www.cdilsemi.com