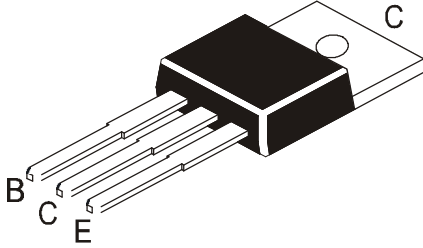


DARLINGTON

PLASTIC POWER TRANSISTORS

TIP130	TIP135
TIP131	TIP136
TIP132	TIP137
NPN	PNP

**TO-220
Plastic Package**



Intended for use in Linear and Switching Applications

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

DESCRIPTION	SYMBOL	TIP130/135	TIP131/136	TIP132/137	UNIT
Collector Emitter Voltage	V _{CEO}	60	80	100	V
Collector Base Voltage	V _{CBO}	60	80	100	V
Emitter Base Voltage	V _{EBO}	5.0			V
Collector Current Continuous	I _C	8.0			A
Collector Current Peak	I _{CM}	12			A
Base Current	I _B	0.3			A
Power Dissipation upto T _c =25°C	P _D	70			W
Power Dissipation upto T _a =25°C Derate above 25°C	P _D	2.0			W
		16			mW/°C
Operating And Storage Junction Temperature	T _j , T _{stg}	- 65 to +150			°C

THERMAL RESISTANCE

Junction to Case	R _{th(j-c)}	1.78	°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)

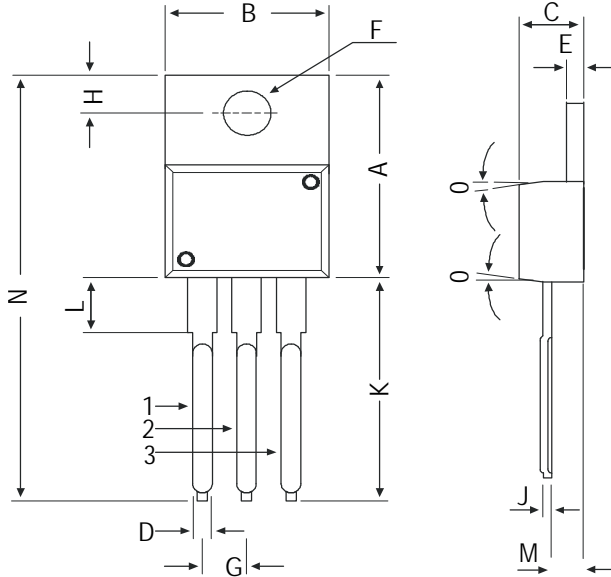
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Collector Cut off Current	I _{CEO}	V _{CE} = Half Rated V _{CEO}		0.5	mA
Collector Cut off Current	I _{CBO}	V _{CB} = Rated V _{CBO}		0.2	mA
Emitter Cut off Current	I _{EBO}	V _{EB} =5V, I _C =0		5.0	mA
Collector Emitter (sus) Voltage	*V _{CEO(sus)}	I _C =30mA, I _B =0	TIP130/135	60	V
			TIP131/136	80	V
			TIP132/137	100	V
Collector Emitter Saturation Voltage	*V _{CE(sat)}	I _C =4A, I _B =16mA		2.0	V
		I _C =6A, I _B =30mA		3.0	V
Base Emitter on Voltage	*V _{BE(on)}	I _C =4A, V _{CE} =4V		2.5	V
DC Current Gain	*h _{FE}	I _C =1A, V _{CE} =4V	500		
		I _C =4A, V _{CE} =4V	1,000	15,000	

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

TIP130 | TIP135
 TIP131 | TIP136
 TIP132 | TIP137
 NPN | PNP

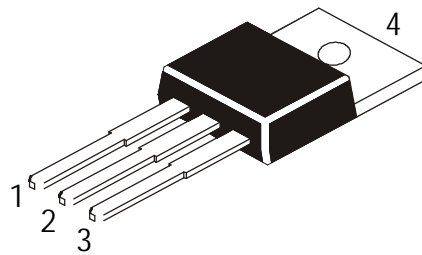
TO-220
Plastic Package

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	

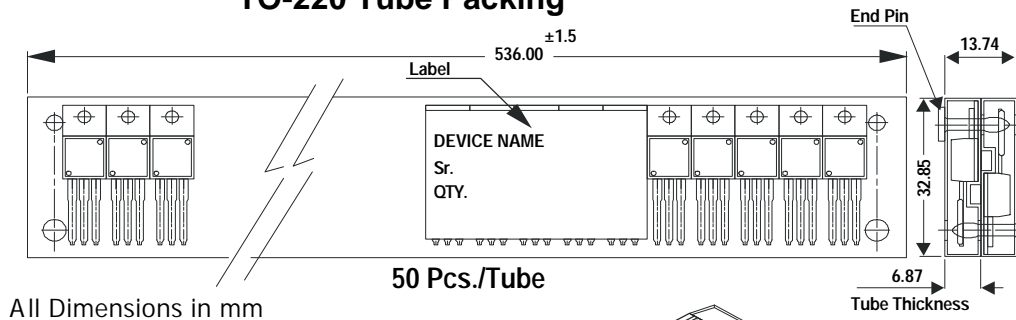
All diminsions in mm.



Pin Configuration

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

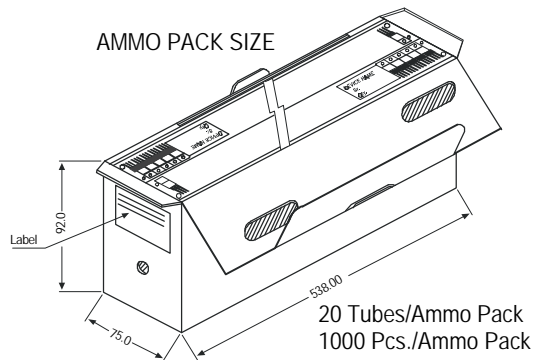
TO-220 Tube Packing



All Dimensions in mm

50 Pcs./Tube

AMMO PACK SIZE



20 Tubes/Ammo Pack
 1000 Pcs./Ammo Pack

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 50 pcs/tube	396 gm/200 pcs 120 gm/50 pcs	3" x 7.5" x 7.5" 3.5" x 3.7" x 21.5"	1.0K 1.0K	17" x 15" x 13.5" 19" x 19" x 19"	16.0K 10.0K	36 kgs 29 kgs

Disclaimer

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