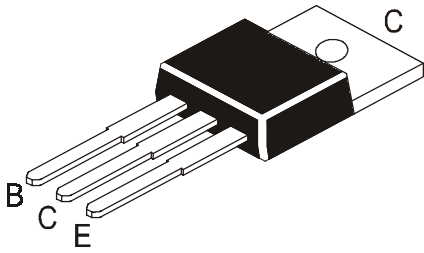


NPN PLASTIC POWER TRANSISTOR

2N5496



**TO-220
Plastic Package**

Medium Power Switching and Amplifier Applications

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

DESCRIPTION	VALUE	UNIT
Collector Base Voltage (Open emitter)	V_{CBO}	90 V
Collector Emitter Voltage(open base)	V_{CEO}	70 V
Collector Emitter Voltage($V_{be}=1.5$)	V_{CEV}	90 V
Collector Emitter Voltage($R_{be}=100\Omega$)	V_{CER}	80 V
Emitter Base Voltage(open collector)	V_{EBO}	5.0 V
Collector Current Continuous	I_C	7.0 A
Base Current	I_B	3 A
Power Dissipation upto Ta=25°C	P_D	1.8 W
Power Dissipation upto Tc=25°C	P_D	50 W
Junction Temperature	T_j	150 °C
Storage Temperature	T_{stg}	-65 to +150 °C
THERMAL RESISTANCE		
Junction to Case	$R_{th(j-c)}$	2.5 °C/W
Junction to Ambient	$R_{th(j-a)}$	70 °C/W

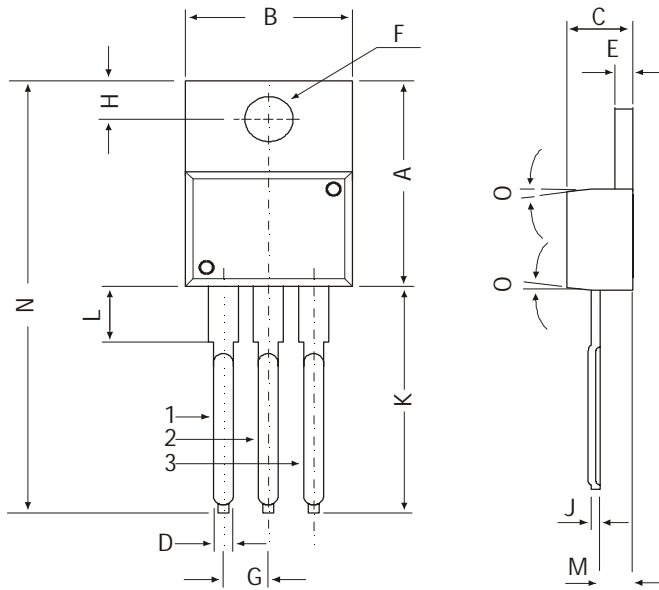
ELECTRICAL CHARACTERISTICS (Tc=25°C Unless Otherwise Specified)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Cut off Current	I_{CEV}	$V_{BE}=0, V_{CE}=85V,$ $V_{BE}=1.5V$			1.0	mA
	I_{CEV}	$V_{BE}=0, V_{CE}=85V,$ $V_{BE}=1.5V, T_C=150 C$			5.0	mA
	I_{CER}	$V_{CE}=70V, R_{BE}=100W$			0.5	mA
	I_{CER}	$V_{CE}=70V, R_{BE}=100W,$ $T_C=150^{\circ} C$			3.5	mA
Emitter Cut off Current	I_{EBO}	$V_{EB}=5V, I_C=0$			1.0	mA
Breakdown sus voltages	$V_{CEO(sus)}$ *	$I_C=100mA, I_B=0$	70			V
	$V_{CER(sus)}$ *	$I_C=100mA, R_{BE}=100W$	80			V
	$V_{CEV(sus)}$ *	$I_C=100mA, V_{BE}=1.5V$	90			V
Base Emitter on Voltage	$V_{BE(on)}$	$I_C=3.5A, V_{CE}=4V$			1.7	V
Collector Emitter Saturation Voltage	$V_{CE(sat)}$ *	$I_C=3.5A, I_B=3.5A$			1.0	V
DC Current Gain	h_{FE} *	$I_C=3.5A, V_{CE}=4V$	20		100	
Transition frequency	f_T	$I_C=500mA, V_{CE}=4V$		0.8		MHz
SWITCHING TIME						
Turn on time	t_{on}	$V_{CC}=30V, I_C=3.5A,$ $I_{B1}=I_{B2}=0.35A$		5.0		μs
Turn off time	t_{off}	$V_{CC}=30V, I_C=3.5A,$ $I_{B1}=I_{B2}=0.35A$		15		μs

*Pulse Test : Pulse duration =300us

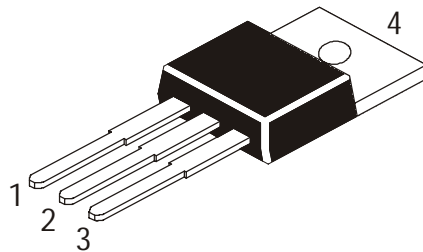
**TO-220
Plastic Package**

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	

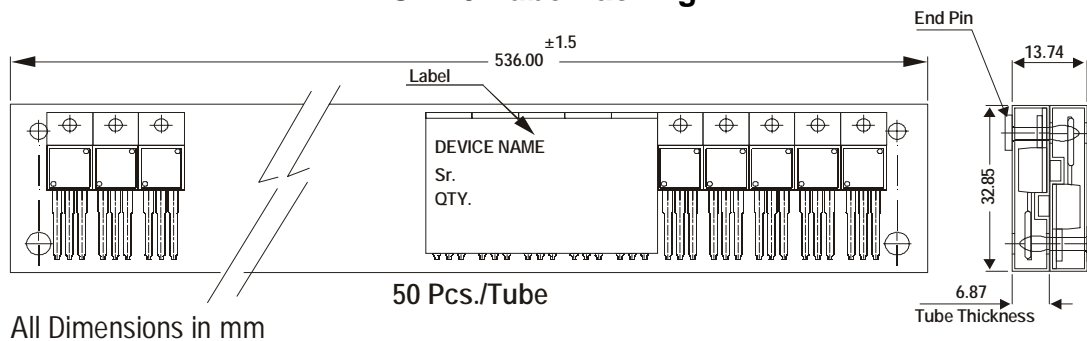
All dimensions in mm.



Pin Configuration

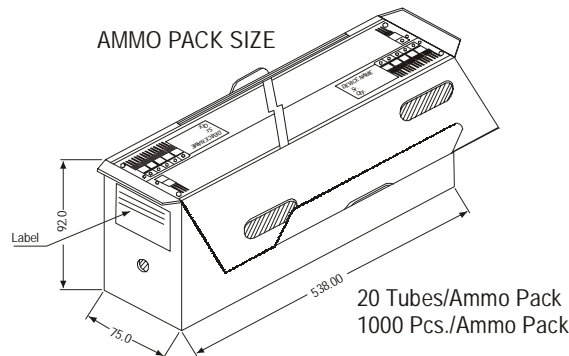
1. Base
2. Collector
3. Emitter
4. Collector

TO-220 Tube Packing



All Dimensions in mm

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 / FP	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

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