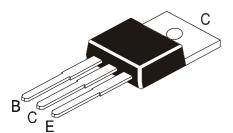


Continental Device India Limited

An ISO/TS16949 and ISO 9001 Certified Company



NPN PLASTIC POWER TRANSISTOR



TO-220 Plastic Package

2N5496

Medium Power Switching and Amplifier Applications

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

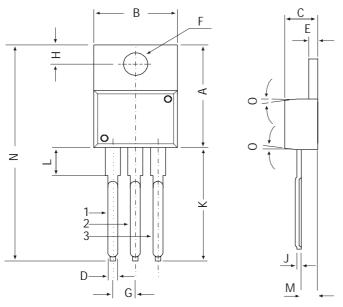
DESCRIPTION		VALUE	UNIT
Collector Base Voltage (Open emitter)	V_{CBO}	90	V
Collector Emitter Voltage(open base)	V_{CEO}	70	V
Collector Emitter Voltage(Vbe=1.5)	$V_{\sf CEV}$	90	V
Collector Emitter Voltage(Rbe=100Ω)	$V_{\sf CER}$	80	V
Emitter Base Voltage(open collector)	V_{EBO}	5.0	V
Collector Current Continuous	I _C	7.0	Α
Base Current	I_{B}	3	Α
Power Dissipation upto Ta=25°C	P_{D}	1.8	W
Power Dissipation upto Tc=25°C	P_{D}	50	W
Junction Temperature	T_i	150	°C
Storage Temperature	T_{stg}	-65 to +150	°C
THERMAL RESISTANCE	.5		
Junction to Case	R _{th (i-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}	$V_{BE}=0, V_{CE}=85V,$			1.0	mΑ
		V _{BE} =1.5V				
	I_{CEV}	$V_{BE}=0, V_{CE}=85V,$			5.0	mΑ
		V_{BE} =1.5V, T_{C} =150 C				
	I_{CER}	$V_{CE}=70V,R_{BE}=100W$			0.5	mΑ
	I_{CER}	$V_{CE}=70V, R_{BE}=100W,$				
		Tc=150 ^O C			3.5	mΑ
Emitter Cut off Current	I_{EBO}	$V_{EB}=5V$, $I_{C}=0$			1.0	mΑ
Breakdown sus voltages	$V_{CEO(sus)}$ *	$I_{C}=100$ mA, $I_{B}=0$	70			V
	$V_{CER(sus)}$ *	$I_C=100$ mA, $R_{BE}=100$ W	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		$I_C=3.5A, V_{CE}=4V$	20		100	
Transition frequency	f_T	$I_C=500$ mA, $V_{CE}=4V$		8.0		MHz
SWITCHING TIME						
Turn on time	t_on	$Vcc=30V,I_C=3.5A,$				
		$I_{B1} = I_{B2} = 0.35A$		5.0		μs
Turn off time	t_{off}	$Vcc=30V,I_C=3.5A,$				
		$I_{B1} = I_{B2} = 0.35A$		15		μs

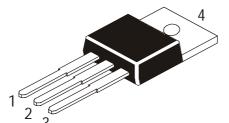
TO-220 Plastic Package

TO-220 Plastic Package



DIM	MIN	MAX	
Α	14.42	16.51	
В	9.63	10.67	
С	3.56	4.83	
D	_	0.90	
Е	1.15	1.40	
F	3.75	3.88	
G	2.29	2.79	
Н	2.54	3.43	
J	_	0.56	
K	12.70	14.73	
L	2.80	4.07	
М	2.03	2.92	
N	_	31.24	
0	7 DEG		

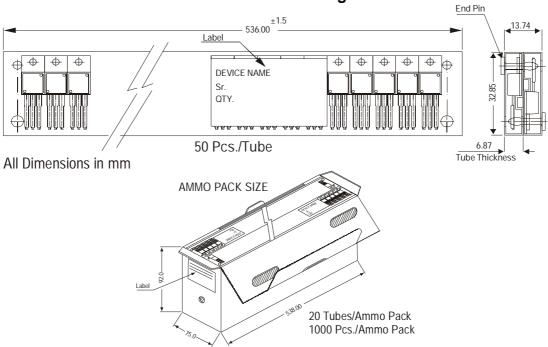
All diminsions in mm.



Pin Configuration

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

TO-220 Tube Packing



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 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"		17" x 15" x 13.5" 19" x 19" x 19"	16.0K 10.0K	36 kgs 29 kgs

Notes 2N5496

TO-220 Plastic Package

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 is 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).

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