



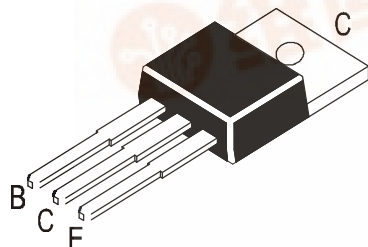
Continental Device India Limited

An ISO/TS16949 and ISO 9001 Certified Company



PNP PLASTIC POWER TRANSISTOR

C45C8



TO-220

Plastic Package

Medium Power Switching and Amplifier Applications

Complementary C44C8

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector- Emitter Voltage	V_{CES}	70	V
Collector- Emitter Voltage	V_{CEO}	60	V
Emitter- Base Voltage	V_{EBO}	5	V
Collector Current Continuous	I_C	4	A
Peak *	I_{CM}	6	A
Base Current Continuous	I_B	2	A
Power Dissipation $T_A=25^\circ\text{C}$	P_D	1.67	W
$T_C=25^\circ\text{C}$		30	
Operating & Storage Junction Temperature Range	T_j, T_{stg}	- 55 to +150	$^\circ\text{C}$

Thermal Resistance

Junction to Ambient	$R_{th} (j-a)$	75	$^\circ\text{C/W}$
Junction to Case	$R_{th} (j-c)$	4.2	$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS ($T_C=25^\circ\text{C}$ Unless Otherwise Specified)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector- Emitter Sustaining Voltage	$V_{CEO(sus)*}$	$I_C=100\text{mA}, I_B=0$	60			V
Collector Cut Off Current	I_{CES}	$V_{CE}=\text{Rated } V_{CES}$			10	μA
Emitter Cut Off Current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$			100	μA
DC Current Gain	h_{FE}^*	$I_C=0.2\text{A}, V_{CE}=1\text{V}$ $I_C=1\text{A}, V_{CE}=1\text{V}$	40 20		120	
Collector Emitter Saturation Voltage	$V_{CE(sat)}^*$	$I_C=1\text{A}, I_B=50\text{mA}$			0.5	V
Base Emitter Saturation Voltage	$V_{BE(sat)}^*$	$I_C=1\text{A}, I_B=100\text{mA}$			1.3	V

Dynamic Characteristics

Collector Capacitance	C_{cbo}	$V_{CB}=10\text{V}, I_E=0$ $f=1\text{MHz}$			125	pF
Current Gain Bandwidth Product	f_T	$V_{CE}=4\text{V}, I_C=20\text{mA}$		40		MHz

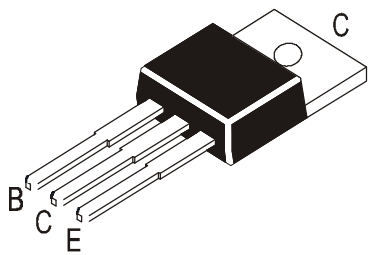
*Pulse Test Pulse Width $\leq 300\text{ms}$, Duty Cycle $\leq 2\%$



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

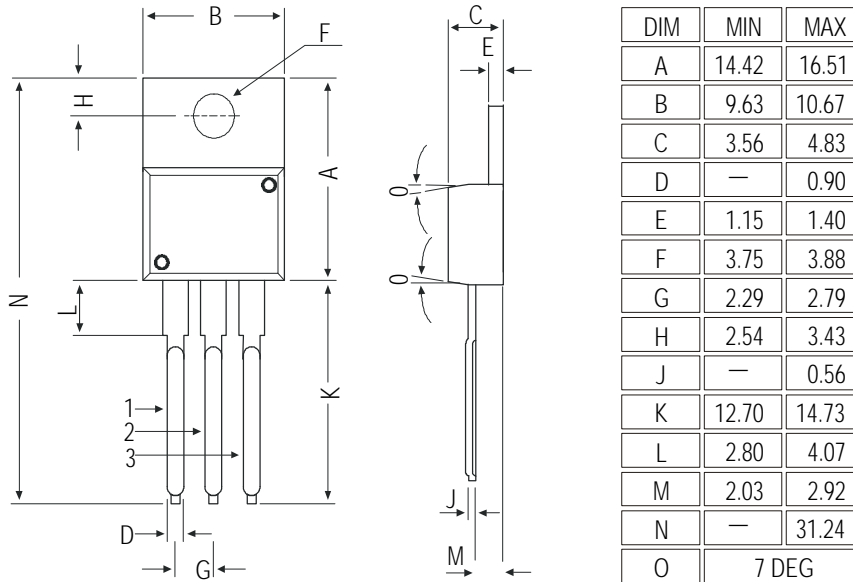
Switching Time

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Delay Time + Rise Time	$t_d + t_r$	$I_C=1A, I_{B1}=I_{B2}=0.1A$		50		ns
Storage Time	t_s	$V_{CC}=30V, t_p=25\mu s$		500		ns
Fall Time	t_f			50		

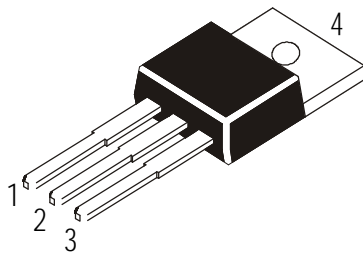
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TO-220 Plastic Package

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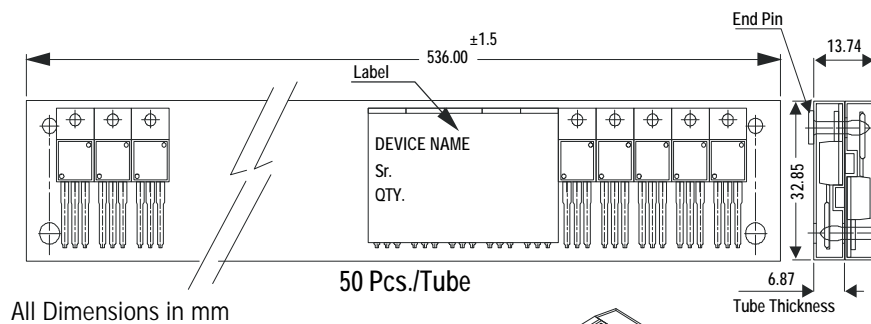
All dimensions in mm.



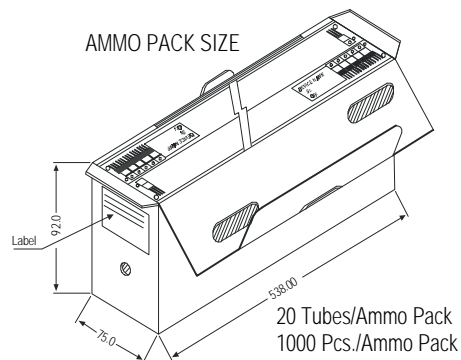
Pin Configuration

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

TO-220 Tube Packing



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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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