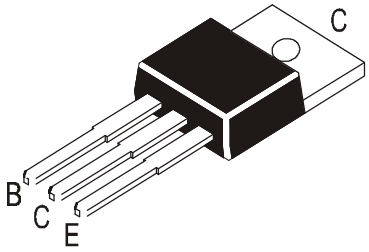
PNP PLASTIC POWER TRANSISTOR

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 Peak *	I_C I_{CM}	4 6	A
Base Current Continuous	I_B	2	A
Power Dissipation T_A=25ºC T_C=25ºC	P_D	1.67 30	W
Operating & Storage Junction Temperature Range	$T_{j, Tstg}$	- 55 to +150	ºC

Thermal Resistance

Junction to Ambient	R_{th} (j-a)	75	ºC/W
Junction to Case	R_{th} (j-c)	4.2	ºC/W

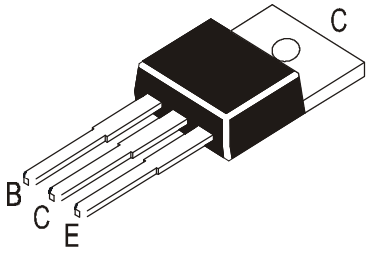
ELECTRICAL CHARACTERISTICS (Tc=25ºC Unless Otherwise Specified)

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

Dynamic Characteristics

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

***Pulse Test Pulse Width≤300µs, Duty Cycle≤2%**



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ELECTRICAL CHARACTERISTICS (Tc=25ºC 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}=1_{B2}=0.1A		50		ns
Storage Time	t_s	V_{CC}=30V, tp=25µs		500		ns
Fall Time	t_f			50		

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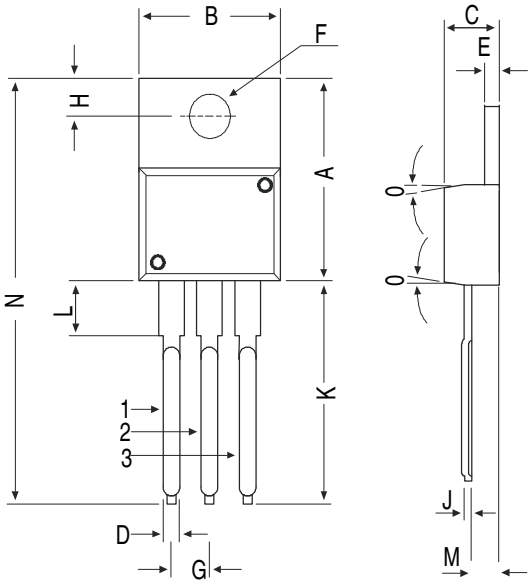
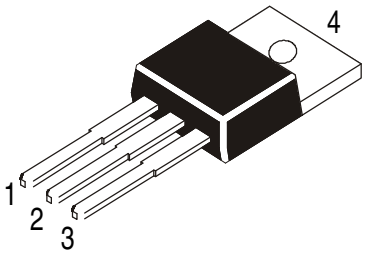


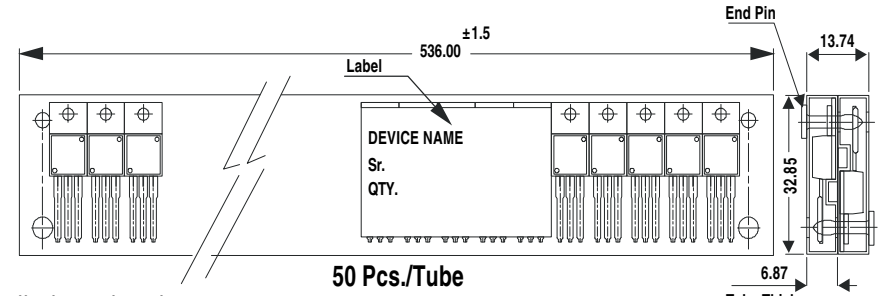
DIM	MIN	MAX
A	14.42	16.51
B	9.63	10.67
C	3.56	4.83
D	—	0.90
E	1.15	1.40
F	3.75	3.88
G	2.29	2.79
H	2.54	3.43
J	—	0.56
K	12.70	14.73
L	2.80	4.07
M	2.03	2.92
N	—	31.24
O	7 DEG	

All diminsions in mm.



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

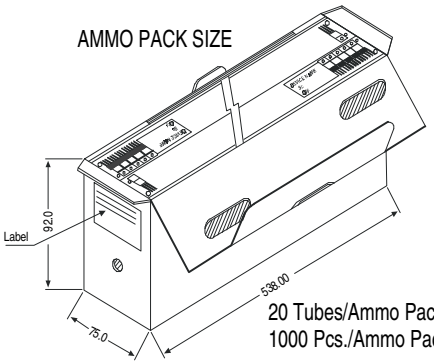
TO-220 Tube Packing



50 Pcs./Tube

All Dimensions in mm

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 / 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

Notes

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Plastic Package

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