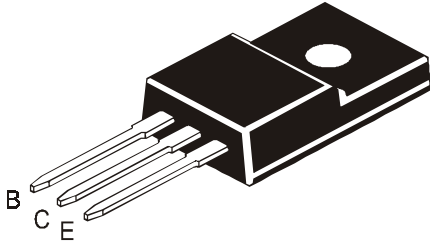


NPN HIGH VOLTAGE HIGH SPEED SILICON POWER TRANSISTOR

BUF508A



**TO-220FP Fully Isolated
Plastic Package**

Applications

High voltage, high - speed switching transistor in TO - 220FP package envelope intended for use in horizontal deflection of colour television circuits.

ABSOLUTE MAXIMUM RATINGS.

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector Emitter Voltage Peak Value; VBE=0	V _{CESM}	1500	V
Collector Emitter Voltage	V _{CEO}	700	V
Collector Current (DC)	I _C	8.0	A
Collector Current (Peak)	I _{CM}	15	A
Base Current (DC)	I _B	4.0	A
Base Current (Peak)	I _{BM}	6.0	A
Reverse Base Current (DC or average over any 20ms period)	- I _{B(AV)}	100	mA
Reverse Base Current *(Peak Value)	I _{BM}	5.0	A
Power Dissipation upto T _{mb} =25°C	P _{tot}	60	W
Operating & Storage Junction Temperature Range	T _{j, Tstg}	-65 to +150	°C

*Turn off current

ELECTRICAL CHARACTERISTICS (T_c=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Collector Cut off Current **	I _{CES}	V _{CE} =V _{CESM} max, V _{BE} =0	-	1.0	mA
Emitter Cut off Current	I _{EBO}	T _j =125°C V _{CE} =V _{CESM} max, V _{BE} =0	-	2.0	mA
Collector Emitter (sus) Voltage	V _{CEO (sus)}	V _{EB} =6V, I _C =0	-	10	mA
Collector Emitter Saturation Voltage	V _{CE (Sat)}	I _C =100mA, I _B =0, L=25mH	700	-	V
Base Emitter Saturation Voltage	V _{BE (Sat)}	I _C =4.5A, I _B =2A	-	1.0	V
		I _C =4.5A, I _B =2A	-	1.3	V

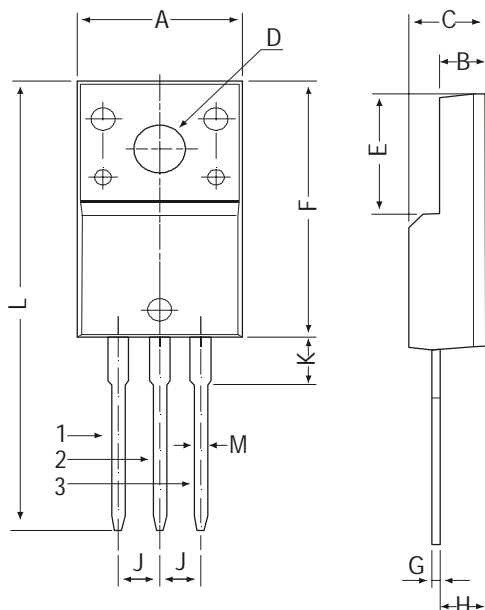
DYNAMIC CHARACTERISTISC

Transition Frequency	f _t	I _C =0.1A, V _{CE} =5V, f=5MHz	TYP 7.0		MHz
Collector Capacitance	C _c	I _E =i _e =0, V _{CB} =10V, f=1MHz	TYP 125		pF

**Measured with half - sinewave voltage (curve tracer)

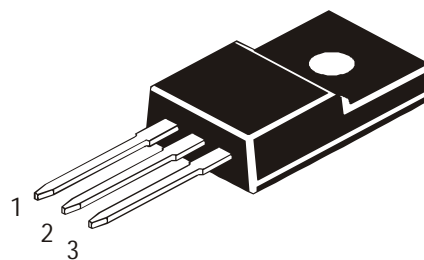
TO-220FP Fully Isolated Plastic Package

TO-220FP Fully Isolated Plastic Package



DIM	MIN	MAX
A	9.96	10.36
B	2.60	3.00
C	4.50	4.90
D	3.10	3.30
E	7.90	8.20
F	16.87	17.27
G	0.45	0.50
H	2.56	2.96
J	2.34	2.74
K	—	3.08
L	—	30.05
M	—	0.80

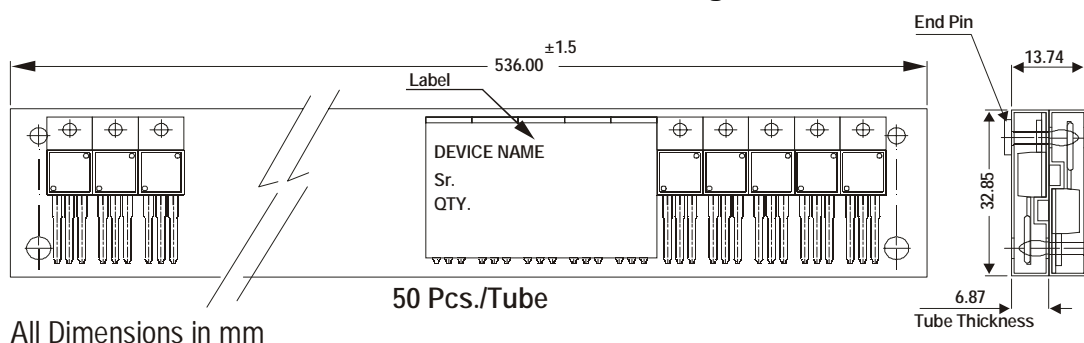
All dimensions in mm.



Pin Configuration

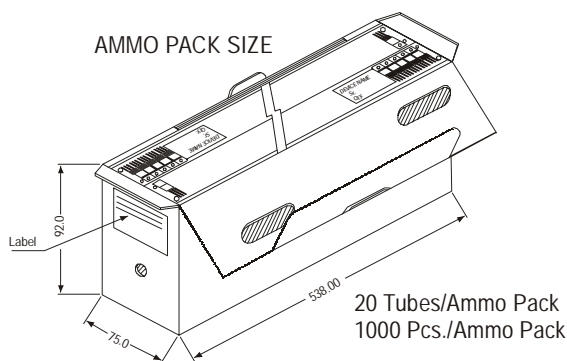
1. Base
2. Collector
3. Emitter

TO-220 FP 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-220FP	200 pcs/polybag 50 pcs/tube	396 gm/200 pcs 135 gm/50 pcs	3" x 7.5" x 7.5" 3.5" x 3.7" x 21.5"	1K 1K	17" x 15" x 13.5" 19" x 19" x 19"	16K 10K	36 kgs 28 kgs

**TO-220FP Fully Isolated
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).

CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.



CDIL is a registered Trademark of

Continental Device India Limited

C-120 Naraina Industrial Area, New Delhi 110 028, India.

Telephone + 91-11-579 6150 Fax + 91-11-579 9569, 579 5290

e-mail sales@cdil.com www.cdil.com