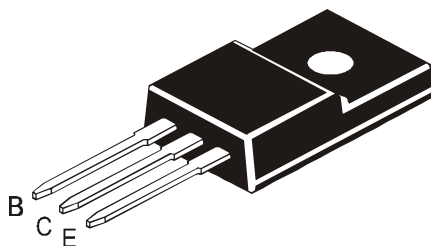


## NPN SILICON PLANAR DALINGTON POWER TRANSISTORS

## CFD1275, CFD1275A



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

**Complementary CFB949, CFB949A**

### ABSOLUTE MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ )

DESCRIPTION	SYMBOL	CFD1275	CFD1275A	UNIT
Collector Base Voltage	$V_{CBO}$	60	80	V
Collector Emitter Voltage	$V_{CEO}$	60	80	V
Emitter Base Voltage	$V_{EBO}$	5		V
RMS Isolation Voltage (for 1sec, R.H. <30%, $T_a = 25^\circ\text{C}$ )	$V_{ISOL}$ (a)	3500		$V_{RMS}$
		1500		$V_{RMS}$
Collector Current Peak	$I_{CP}$	4		A
Collector Current	$I_C$	2		A
Collector Power Dissipation @ $T_c=25^\circ\text{C}$ @ $T_a=25^\circ\text{C}$	$P_C$	35		W
		2		W
Junction Temperature	$T_j$	150		$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to +150		$^\circ\text{C}$

**\*\* RMS Isolation Voltage: (a) 3500  $V_{RMS}$  with Package in Clip Mounting Position (b) 1500  $V_{RMS}$  with Package in Screw Mounting Position (for 1sec, R.H.<30%,  $T_a=25^\circ\text{C}$ ; Pulse Test: Pulse Width  $\leq 300\mu\text{s}$ , Duty Cycle  $\leq 2\%$ )**

### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Cut Off Current	$I_{CBO}$	$V_{CB}=60\text{V}, I_E=0$ , <b>CFD1275</b>			1.0	mA
		$V_{CB}=80\text{V}, I_E=0$ , <b>CFD1275A</b>			1.0	mA
Collector Cut Off Current	$I_{CEO}$	$V_{CE}=30\text{V}, I_B=0$ , <b>CFD1275</b>			2.0	mA
		$V_{CE}=40\text{V}, I_B=0$ , <b>CFD1275A</b>			2.0	mA
Emitter Cut Off Current	$I_{EBO}$	$V_{EB}=5\text{V}, I_C=0$			2.0	mA
Collector Emitter Voltage	$V_{CEO}$	$I_C=30\text{mA}, I_B=0$				
		<b>CFD1275</b>	60			V
		<b>CFD1275A</b>	80			V
DC Current Gain	$h_{FE}$	$V_{CE}=4\text{V}, I_C=1\text{A}$	1000			
	$*h_{FE}$	$V_{CE}=4\text{V}, I_C=2\text{A}$	1000		10000	
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=2\text{A}, I_B=8\text{mA}$			2.5	V
Base Emitter On Voltage	$V_{BE}$	$V_{CE}=4\text{V}, I_C=2\text{A}$			2.8	V
Turn On Time	$t_{on}$	$I_C=2\text{A}, I_{B1} = - I_{B2}=8\text{mA}$		0.5		$\mu\text{s}$
Storage Time	$t_{stg}$			4.0		$\mu\text{s}$
Fall Time	$t_r$			1.0		$\mu\text{s}$

**\* $h_{FE}$  Classification**

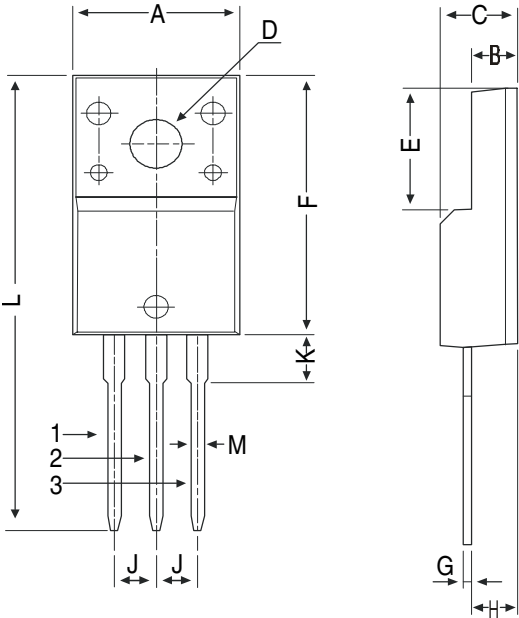
**R : 1000 - 2500**

**Q : 2000 - 5000**

**P : 4000 - 10000**

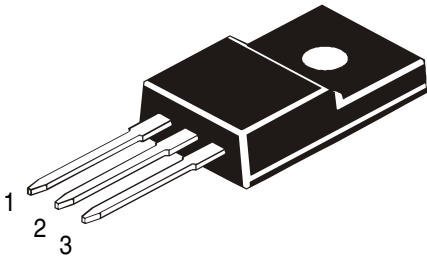
TO-220FP Fully Isolated Plastic Package

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

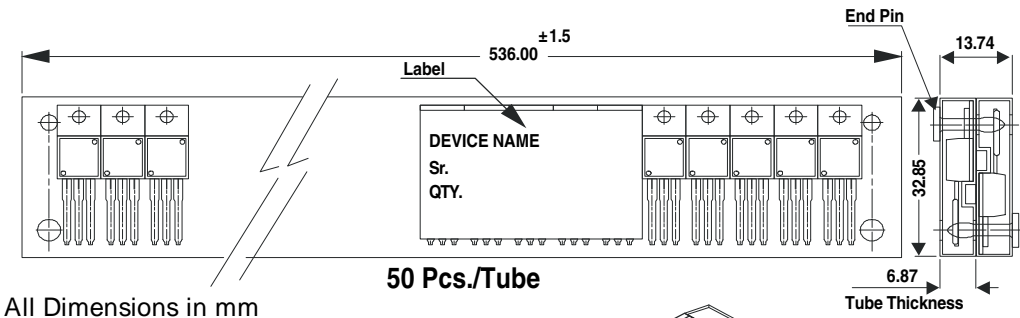
All diminsions in mm.



Pin Configuration

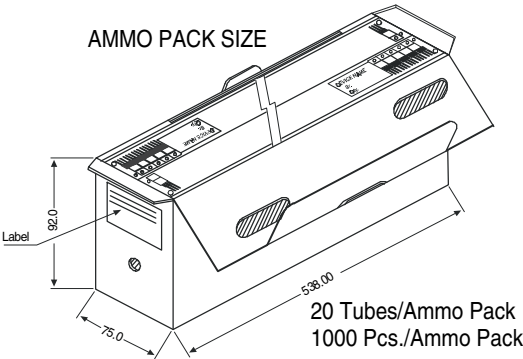
- 1. Base
- 2. Collector
- 3. Emitter

TO-220 FP Tube Packing



50 Pcs./Tube

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

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

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**Continental Device India Limited**

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