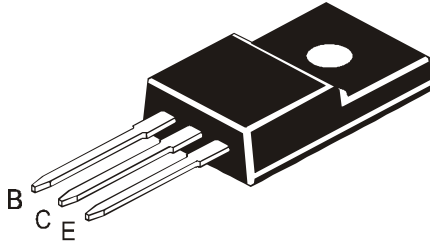


**NPN SILICON PLANAR DALINGTON POWER TRANSISTORS**

**CFD1275, CFD1275A**



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

**Complementary CFB949, CFB949A**

**ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25°C)**

DESCRIPTION	SYMBOL	CFD1275	CFD1275A	UNIT
Collector Base Voltage	V <sub>CB0</sub>	60	80	V
Collector Emitter Voltage	V <sub>CEO</sub>	60	80	V
Emitter Base Voltage	V <sub>EBO</sub>	5		V
RMS Isolation Voltage (for 1sec, R.H. <30%, T <sub>a</sub> = 25°C)	** V <sub>ISOL</sub> (a)	3500		V <sub>RMS</sub>
	(b)	1500		V <sub>RMS</sub>
Collector Current Peak	I <sub>CP</sub>	4		A
Collector Current	I <sub>C</sub>	2		A
Collector Power Dissipation @T <sub>c</sub> =25°C @T <sub>a</sub> =25°C	P <sub>C</sub>	35		W
		2		W
Junction Temperature	T <sub>j</sub>	150		°C
Storage Temperature Range	T <sub>stg</sub>	- 55 to +150		°C

**\*\* RMS Isolation Voltage: (a) 3500 V<sub>RMS</sub> with Package in Clip Mounting Position (b) 1500 V<sub>RMS</sub> with Package in Screw Mounting Position (for 1sec, R.H.<30%, T<sub>a</sub>=25°C; Pulse Test: Pulse Width ≤300ms, Duty Cycle≤2%)**

**ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless specified otherwise)**

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Cut Off Current	I <sub>CBO</sub>	V <sub>CB</sub> = 60V, I <sub>E</sub> = 0, <b>CFD1275</b>			1.0	mA
		V <sub>CB</sub> = 80V, I <sub>E</sub> = 0, <b>CFD1275A</b>			1.0	mA
Collector Cut Off Current	I <sub>CEO</sub>	V <sub>CE</sub> = 30V, I <sub>B</sub> = 0, <b>CFD1275</b>			2.0	mA
		V <sub>CE</sub> = 40V, I <sub>B</sub> = 0, <b>CFD1275A</b>			2.0	mA
Emitter Cut Off Current	I <sub>EBO</sub>	V <sub>EB</sub> = 5V, I <sub>C</sub> = 0			2.0	mA
Collector Emitter Voltage	V <sub>CEO</sub>	I <sub>C</sub> = 30mA, I <sub>B</sub> = 0				
			<b>CFD1275</b>	60		V
		<b>CFD1275A</b>	80		V	
DC Current Gain	h <sub>FE</sub> *h <sub>FE</sub>	V <sub>CE</sub> = 4V, I <sub>C</sub> = 1A V <sub>CE</sub> = 4V, I <sub>C</sub> = 2A	1000 1000		10000	
Collector Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = 2A, I <sub>B</sub> = 8mA			2.5	V
Base Emitter On Voltage	V <sub>BE</sub>	V <sub>CE</sub> = 4V, I <sub>C</sub> = 2A			2.8	V
Turn On Time	t <sub>on</sub>	I <sub>C</sub> = 2A, I <sub>B1</sub> = - I <sub>B2</sub> = 8mA		0.5		μs
Storage Time	t <sub>stg</sub>			4.0		μs
Fall Time	t <sub>r</sub>			1.0		μs

\*h<sub>FE</sub> Classification

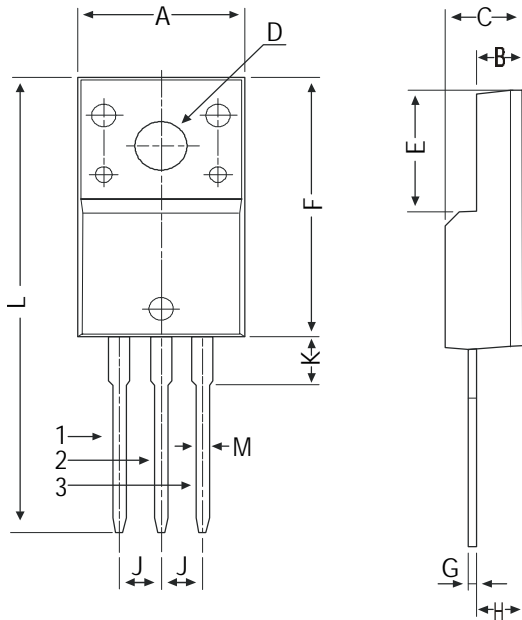
**R : 1000 - 2500**

**Q : 2000 - 5000**

**P : 4000 - 10000**

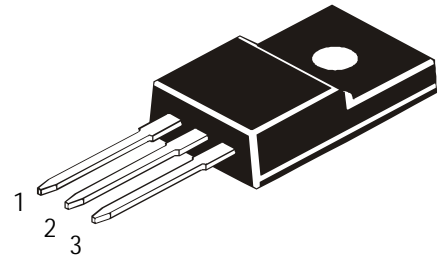
**TO-220FP Fully Isolated Plastic Package**

**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

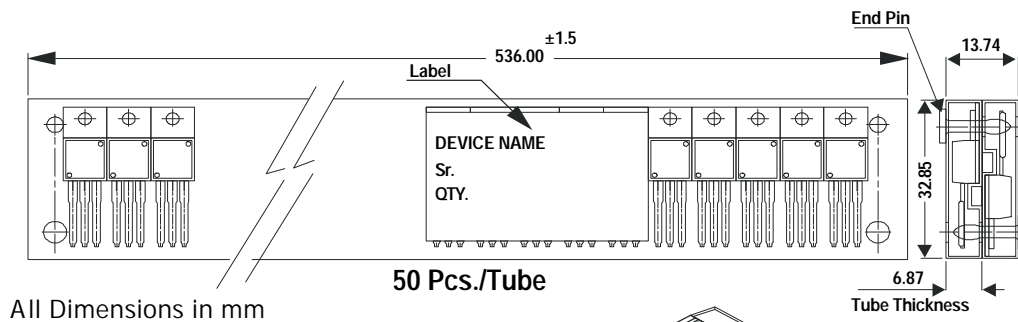
All dimensions in mm.



Pin Configuration

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

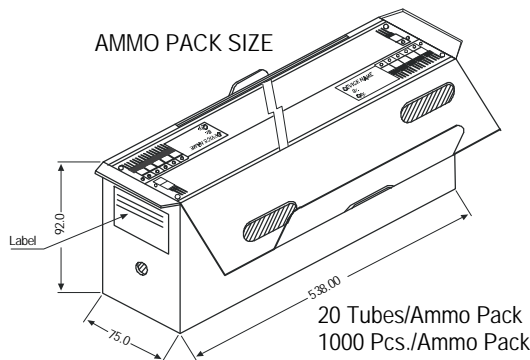
**TO-220 FP Tube Packing**



All Dimensions in mm

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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