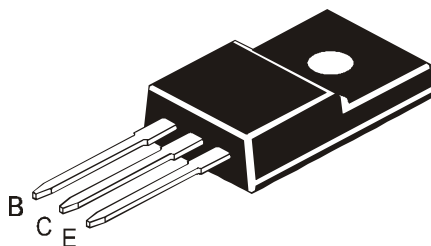


PNP SILICON PLANAR POWER TRANSISTOR

CFA1046

TO-220FP Fully Isolated
Plastic Package



Complementary CFC2026

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector Base Voltage	V_{CBO}	60	V
Collector Emitter Voltage	V_{CEO}	60	V
Emitter Base Voltage	V_{EBO}	7.0	V
RMS Isolation Voltage (for 1sec, R.H. <30%, $T_a = 25^\circ\text{C}$)	** V_{ISOL} (a) (b)	3500 1500	V_{RMS} V_{RMS}
Collector Current	I_C	3.0	A
Base Current	I_B	0.5	A
Collector Power Dissipation @ $T_a=25^\circ\text{C}$ @ $T_c=25^\circ\text{C}$	P_C	2.0 25	W 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}	$V_{CB} = 60\text{V}, I_E = 0$			100	μA
Emitter Cut Off Current	I_{EBO}	$V_{EB} = 7\text{V}, I_C = 0$			100	μA
Collector Emitter Voltage	V_{CEO}	$I_C = 50\text{mA}, I_B = 0$	60			V
DC Current Gain	* h_{FE} h_{FE}	$V_{CE} = 5\text{V}, I_C = 0.5\text{A}$ $V_{CE} = 5\text{V}, I_C = 3\text{A}$	100 20		300	
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 2\text{A}, I_B = 0.2\text{A}$			1	V
Base Emitter On Voltage	$V_{BE(on)}$	$V_{CE} = 5\text{V}, I_C = 0.5\text{A}$			1	V
Transition Frequency	f_T	$V_{CE} = 5\text{V}, I_C = 0.5\text{A}$		30		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$		45		pF

Switching Time

Turn On Time	t_{on}	$I_{B1} = I_{B2} = 0.2\text{A}$ $V_{CC} = 30\text{V}$ Duty Cycle $\leq 1\%$		0.4		μs
Storage Time	t_{stg}			1.7		μs
Fall Time	t_f			0.5		μs

* h_{FE} Classification

Y : 100 - 200

GR : 150 - 300

Technical drawing of a 3-pin industrial plug. The drawing includes a top view and a side view. The top view shows a rectangular body with a central circular hole and four smaller circular holes at the corners. The side view shows the profile of the plug, including the three pins and the mounting bracket. Dimensions are labeled as follows:

- A**: Width of the top section.
- B**: Width of the mounting bracket.
- C**: Distance from the mounting bracket to the start of the pins.
- D**: Distance from the top edge to the center of the central hole.
- E**: Height of the mounting bracket.
- F**: Height of the main body.
- G**: Height of the pins.
- H**: Thickness of the mounting bracket.
- I**: Thickness of the main body.
- J**: Diameter of the pins.
- K**: Distance from the bottom of the main body to the start of the pins.
- L**: Total height of the plug.
- M**: Distance between the pins.

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

A 3-pin DIN connector is shown, with pins labeled 1, 2, and 3. The connector is a black rectangular block with a circular hole on the top surface. Three pins extend from the front face, labeled 1, 2, and 3 from left to right.

1. Base
2. Collector
3. Emitter

Diagram illustrating the dimensions and components of a 50 Pcs./Tube component. The drawing shows a rectangular component with a central label area and two sets of pins on the left and right sides. The dimensions are specified in millimeters (mm).

Key dimensions and labels:

- Overall Length:** 536.00 mm (with a tolerance of ± 1.5 mm).
- Label Area:** A central rectangular area labeled "Label" containing the text "DEVICE NAME" and "Sr. QTY.".
- Pin Length:** 13.74 mm.
- Pin Spacing:** 32.85 mm.
- Tube Thickness:** 6.87 mm.
- End Pin:** Indicated at the right end of the component.

All Dimensions in mm

50 Pcs./Tube

Diagram illustrating the dimensions of the Ammo Pack:

- Height: 92.0
- Width: 75.0
- Length: 538.00

The pack is labeled with "20 Tubes/Ammo Pack" and "1000 Pcs./Ammo Pack".

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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CDIL is a registered Trademark of
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.cdisemi.com