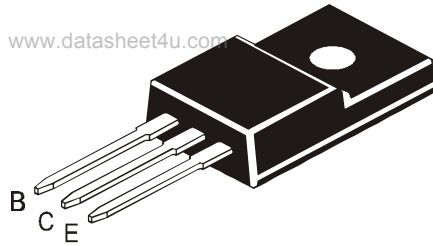


**PNP SILICON PLANAR POWER TRANSISTOR**

**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)	3500	$V_{RMS}$
	(b)	1500	$V_{RMS}$
Collector Current	$I_C$	3.0	A
Base Current	$I_B$	0.5	A
Collector Power Dissipation @ $T_a=25^\circ\text{C}$ @ $T_c=25^\circ\text{C}$		2.0	W
		25	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  $\leq 300\text{ms}$ , 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	$\mu\text{A}$
Emitter Cut Off Current	$I_{EBO}$	$V_{EB} = 7\text{V}, I_C=0$			100	$\mu\text{A}$
Collector Emitter Voltage	$V_{CEO}$	$I_C = 50\text{mA}, I_B=0$	60			V
DC Current Gain	* $h_{FE}$	$V_{CE} = 5\text{V}, I_C = 0.5\text{A}$	100		300	
	$h_{FE}$	$V_{CE} = 5\text{V}, I_C = 3\text{A}$	20			
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**

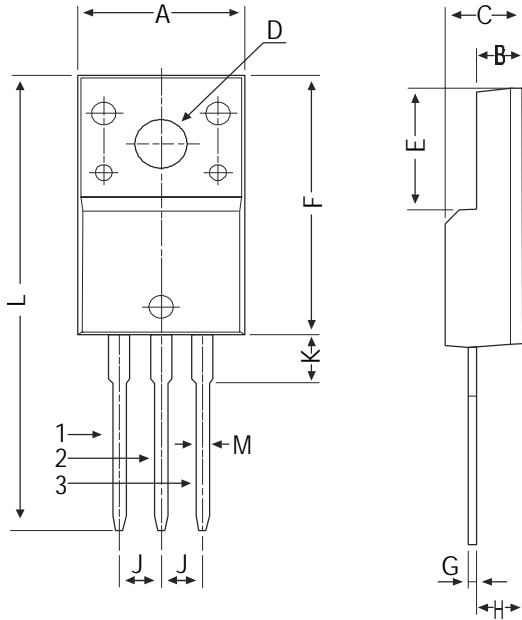
Turn On Time	$t_{on}$	$I_{B1} = I_{B2} = 0.2\text{A}$ $V_{CC} = 30\text{V}$ Duty Cycle $\leq 1\%$		0.4		$\mu\text{s}$
Storage Time	$t_{stg}$			1.7		$\mu\text{s}$
Fall Time	$t_f$			0.5		$\mu\text{s}$

\* $h_{FE}$  Classification

Y : 100 - 200

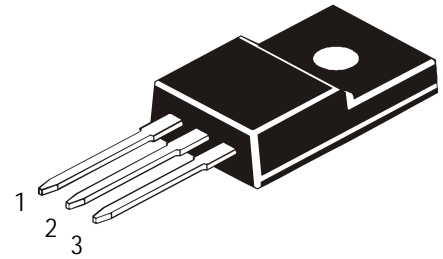
GR : 150 - 300

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

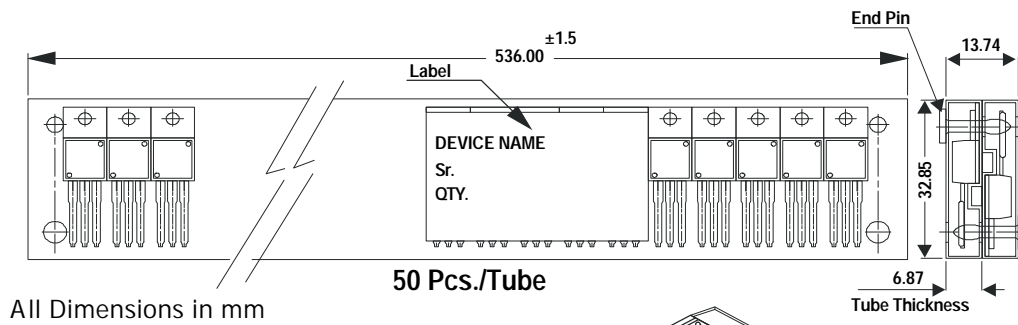
All diminsions in mm.



Pin Configuration

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

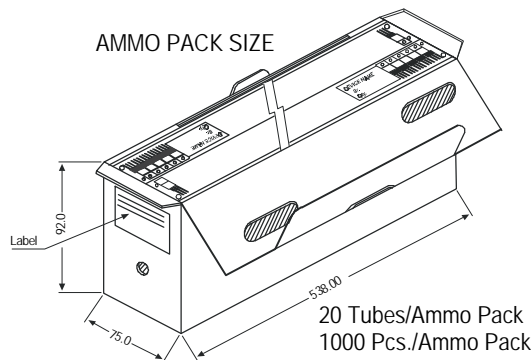
TO-220 FP Tube Packing



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

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