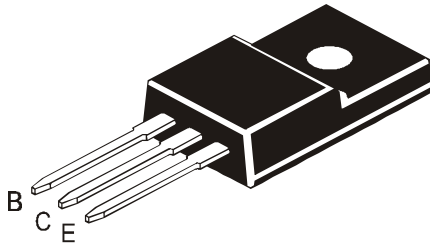


NPN SILICON PLANAR POWER TRANSISTORS

CFC3944, CFC3944A



TO-220FP Fully Isolated Plastic Package

Complementary CFA1535, CFA1535A

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	CFC3944	CFC3944A	UNIT
Collector Base Voltage	V_{CBO}	150	180	V
Collector Emitter Voltage	V_{CEO}	150	180	V
Emitter Base Voltage	V_{EBO}	5.0		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 Peak	I_{CP}	1.5		A
Collector Current	I_C	1.0		A
Collector Power Dissipation @ $T_c=25^\circ\text{C}$ @ $T_a=25^\circ\text{C}$	P_C	15		W
		2.0		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 ($T_c=25^\circ\text{C}$ unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Cut Off Current	I_{CBO}	$V_{CB}=150\text{V}$, CFC3994			10	μA
		$V_{CB}=180\text{V}$, CFC3994A			10	μA
Collector Emitter Voltage	V_{CEO}	$I_C=1\text{mA}$, $I_B=0$ CFC3944 CFC3944A	150			V
			180			V
Emitter Base Voltage	V_{EBO}	$I_E=10\mu\text{A}$, $I_C=0$	5			V
DC Current Gain	* h_{FE} h_{FE}	$V_{CE}=10\text{V}$, $I_C=150\text{mA}$ $V_{CE}=5\text{V}$, $I_C=500\text{mA}$	95		220	
			50			
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500\text{mA}$, $I_B=50\text{mA}$			2	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=500\text{mA}$, $I_B=50\text{mA}$			2	V
Transition Frequency	f_T	$V_{CE}=10\text{V}$, $I_C=50\text{mA}$, $f=1\text{MHz}$		200		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$			50	pF

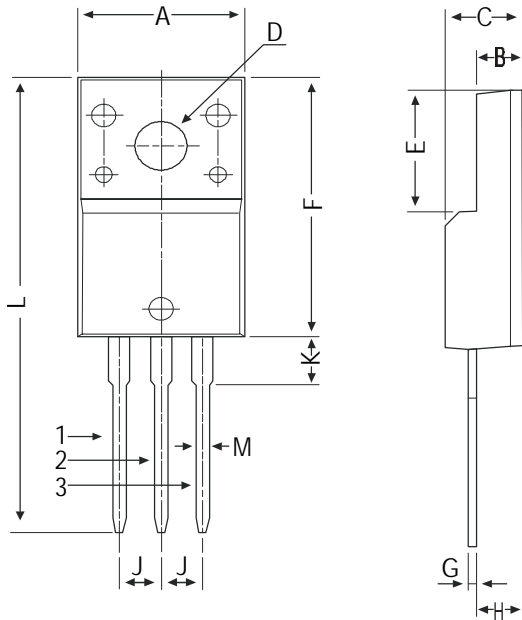
* h_{FE} Classification

Q : 95 - 155

R : 130 - 220

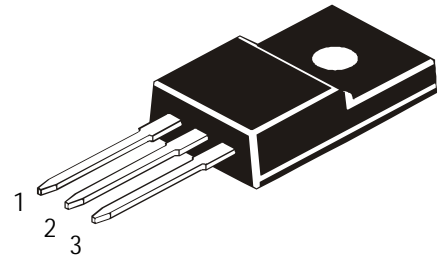
TO-220FP Fully Isolated Plastic Package

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

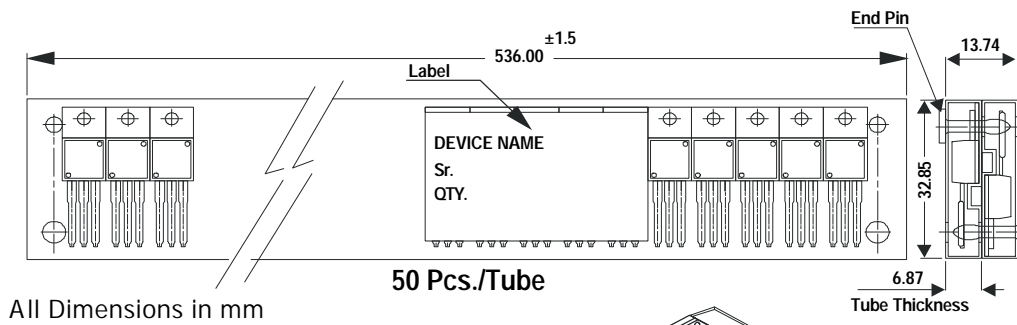
All dimensions in mm.



Pin Configuration

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

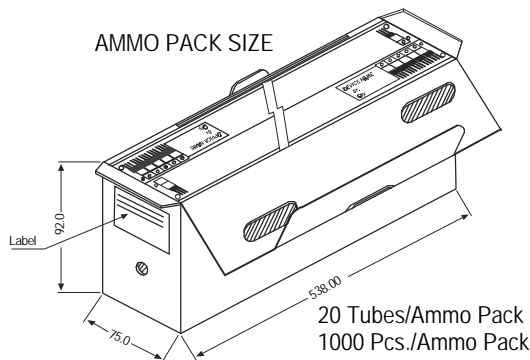
TO-220 FP Tube Packing



50 Pcs./Tube

All Dimensions in mm

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

Disclaimer

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