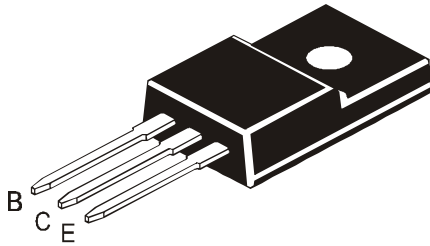


SILICON PLANAR POWER TRANSISTORS

CJF15032 NPN
CJF15033 PNP



TO-220FP Fully Isolated Plastic Package

Designed For Use As High - Frequency Drivers in Audio Amplifiers.

ABSOLUTE MAXIMUM RATINGS.

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector Base Voltage	V_{CBO}	250	V
Collector Emitter Voltage	V_{CEO}	250	V
Emitter Base Voltage	V_{EBO}	5	V
RMS Isolation Voltage (for 1sec,R.H. <30%, $T_A=25^\circ C$)	(1) V_{ISOL} (a)	3500	V
	(b)	1500	V
Collector Current - Continuous	I_C	8	A
- Peak		16	A
Base Current	I_B	2	A
Total Power Dissipation @ $T_c=25^\circ C$	P_D	50	W
Derate Above $25^\circ C$		0.4	W/ $^\circ C$
Total Power Dissipation @ $T_a=25^\circ C$	P_D	2	W
Derate Above $25^\circ C$		0.016	W/ $^\circ C$
Operating and Storage Junction Temperature Range	T_j, T_{stg}	-65 to +150	$^\circ C$
THERMAL RESISTANCE			
From Junction to Ambient	$R_{th(j-a)}$	62.5	$^\circ C/W$
From Junction to Case	$R_{th(j-c)}$	2.5	$^\circ C/W$

ELECTRICAL CHARACTERISTICS ($T_c=25^\circ C$ unless specified otherwise)

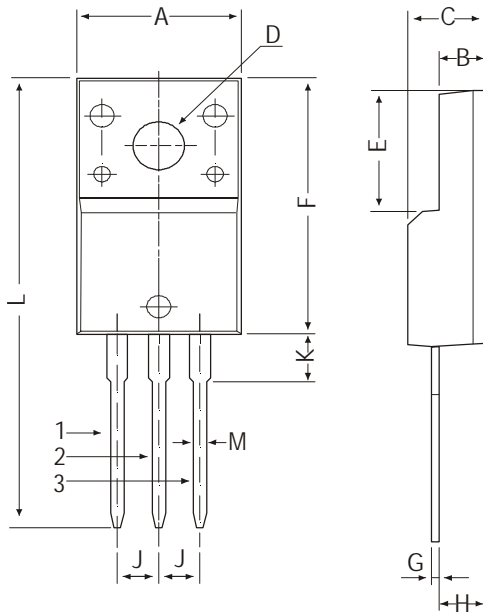
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Collector Emitter (sus) Voltage	$V_{CEO(sus)}$ *	$I_C=10mA, I_B=0$	250	-	V
Collector Cut off Current	I_{CBO}	$V_{CB}=150V, I_E=0$	-	10	μA
Emitter Cut off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	-	10	μA
DC Current Gain	h_{FE} *	$I_C=0.5A, V_{CE}=5V$	50	-	
		$I_C=1.0A, V_{CE}=5V$	50	-	
		$I_C=2.0A, V_{CE}=5V$	10	-	
Collector Emitter Saturation Voltage	$V_{CE(sat)}$ *	$I_C=1A, I_B=0.1A$	-	0.5	V
Base Emitter on Voltage	$V_{BE(on)}$ *	$I_C=1.0A, V_{CE}=5V$	-	1.0	V
DYNAMIC CHARACTERISTICS					
Current Gain - Bandwidth Product **	f_T	$I_C=500mA, V_{CE}=10V$ $f_{test}=1MHz$	30	-	MHz

(1) 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% $T_a=25^\circ C$; Pulse Test: Pulse Width $\leq 300ms$, Duty Cycle $\leq 2\%$)

* Pulse Test: Pulse Width $\leq 300ms$, Duty Cycle $\leq 2\%$

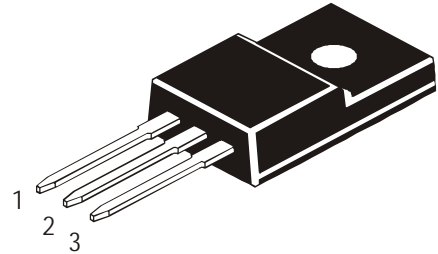
** $f_T = I_{h_{fe}} | f_{test}$

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

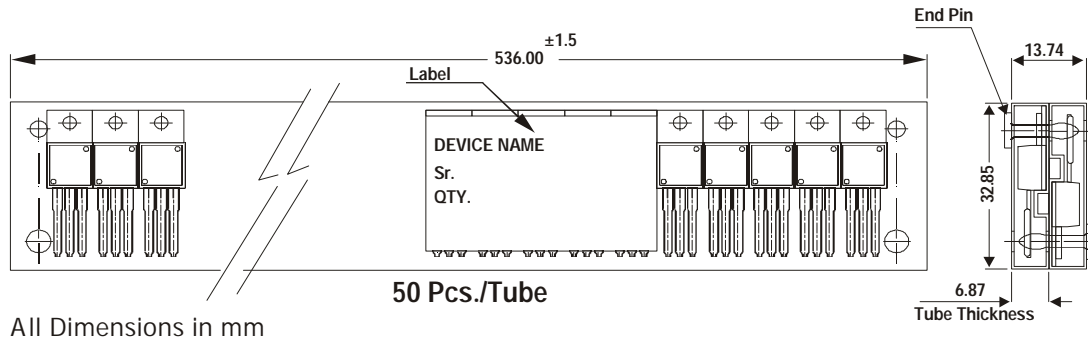
All dimensions in mm.



Pin Configuration

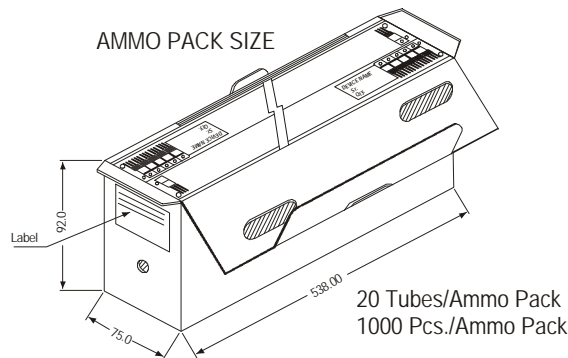
1. Base
2. Collector
3. Emitter

TO-220 FP Tube Packing



All Dimensions in mm

AMMO PACK SIZE



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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