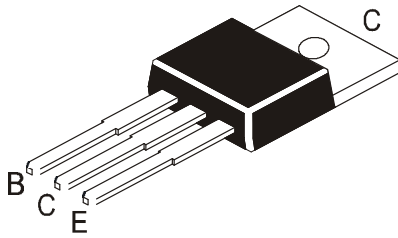


NPN PLASTIC POWER TRANSISTOR

SJE1349

TO-220
Plastic Package



Power Linear and Switching Applications

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector Base Voltage	V_{CBO}	73	V
Collector Emitter Voltage	V_{CEO}	63	V
Emitter Base Voltage	V_{EBO}	7	V
Collector Current	I_C	6	A
Collector Current Peak	I_{CM}	10	A
Base Current Continuous	I_B	2	A
Power Dissipation upto $T_c=25^\circ\text{C}$	P_D	65	W
Operating And Storage Junction Temperature Range	T_j, T_{stg}	- 65 to +150	$^\circ\text{C}$

THERMAL RESISTANCE

Junction to Ambient in free air	$R_{th(j-a)}$	62.5	$^\circ\text{C/W}$
Junction to Case	$R_{th(j-c)}$	1.92	$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS ($T_c=25^\circ\text{C}$ Unless Specified Otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Emitter (sus) Voltage	$*V_{CEO(sus)}$	$I_C=30\text{mA}, I_B=0$	63			V
Collector Cut Off Current	I_{CBO}	$V_{CB}=63\text{V}, I_E=0$			0.3	mA
Collector Cut Off Current	I_{CES}	$V_{CE}=73\text{V}, V_{BE}=0$			0.3	mA
Emitter Cut Off Current	I_{EBO}	$V_{EB}=5.2\text{V}, I_C=0$			0.9	mA
DC Current Gain	$*h_{FE}$	$I_C=4\text{A}, V_{CE}=4\text{V}$	43		100	
Collector Emitter Saturation Voltage	$*V_{CE(sat)}$	$I_C=4\text{A}, I_B=480\text{mA}$			1.07	V
		$I_C=10\text{A}, I_B=1\text{A}$			3.0	V

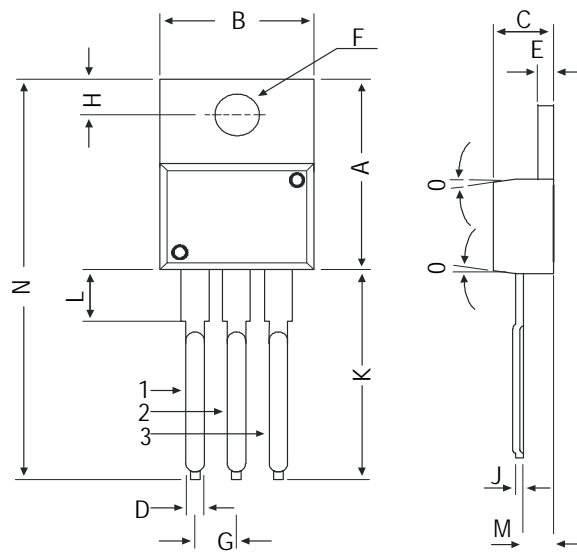
Switching Time

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Small Signal Current	h_{fe}	$I_C=0.5\text{A}, V_{CE}=10\text{V}, f=1\text{KHz}$	20			
Transition Frequency	f_T	$I_C=0.5\text{A}, V_{CE}=10\text{V}, f=1\text{MHz}$	3			MHz

*Pulse test $t_p \leq 300\text{ms}$, Duty cycle $\leq 2\%$

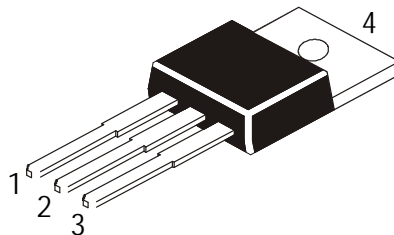
SJE1349 Rev_1 230703E

TO-220 Plastic Package



DIM	MIN	MAX
A	14.42	16.51
B	9.63	10.67
C	3.56	4.83
D	—	0.90
E	1.15	1.40
F	3.75	3.88
G	2.29	2.79
H	2.54	3.43
J	—	0.56
K	12.70	14.73
L	2.80	4.07
M	2.03	2.92
N	—	31.24
O	7 DEG	

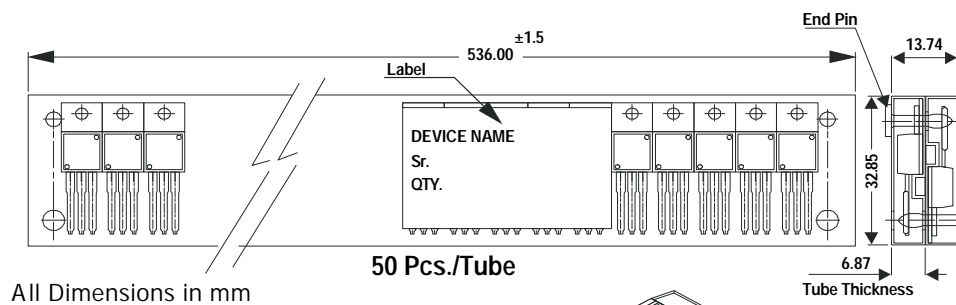
All dimensions in mm.



Pin Configuration

1. Base
2. Collector
3. Emitter
4. Collector

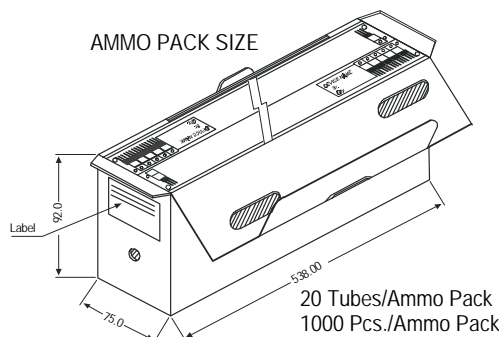
TO-220 Tube Packing



All Dimensions in mm

50 Pcs./Tube

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-220	200 pcs/polybag	396 gm/200 pcs	3" x 7.5" x 7.5"	1.0K	17" x 15" x 13.5"	16.0K	36 kgs
	50 pcs/tube	120 gm/50 pcs	3.5" x 3.7" x 21.5"	1.0K	19" x 19" x 19"	10.0K	29 kgs

Disclaimer

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