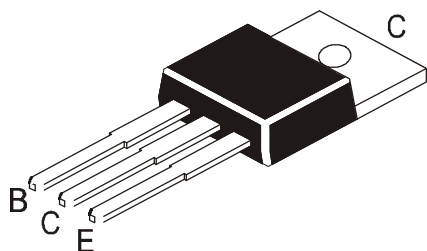




Continental Device India Limited

An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company

**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)**

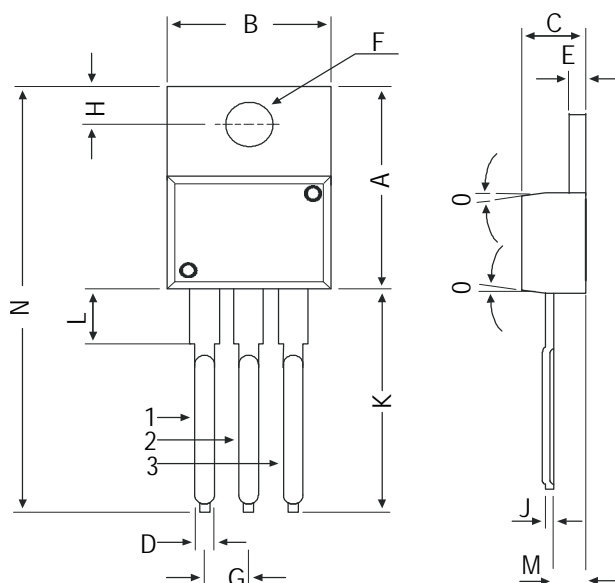
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Emitter (sus) Voltage	$*V_{CEO(sus)}$	$I_C=30\text{mA}, I_B=0$	63			V
Collector Cut Off Current	$I_{CBO}$	$V_{CB}=63\text{V}, I_E=0$			0.3	mA
Collector Cut Off Current	$I_{CES}$	$V_{CE}=73\text{V}, V_{BE}=0$			0.3	mA
Emitter Cut Off Current	$I_{EBO}$	$V_{EB}=5.2\text{V}, I_C=0$			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

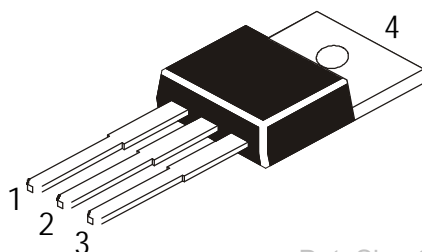
\*Pulse test  $t_p \leq 300\text{ms}$ , Duty cycle  $\leq 2\%$ 

SJE1349 Rev\_1 230703E

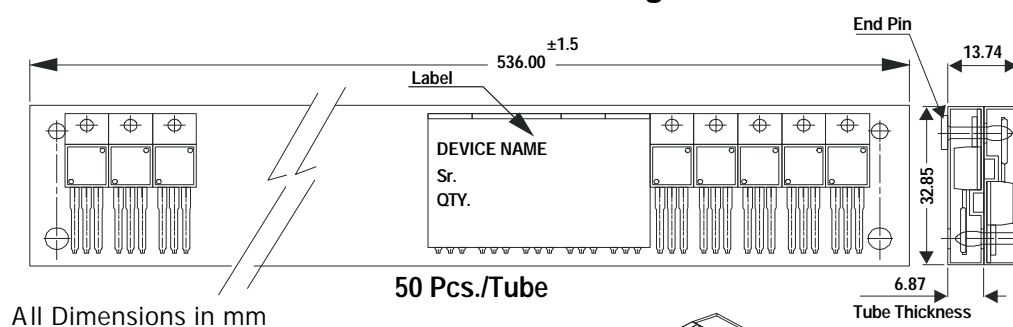
**SJE1349****TO-220  
Plastic Package****TO-220 Plastic Package**

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	

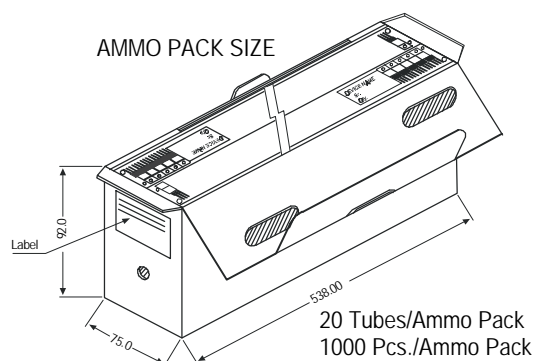
All dimensions in mm.

**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

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### Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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