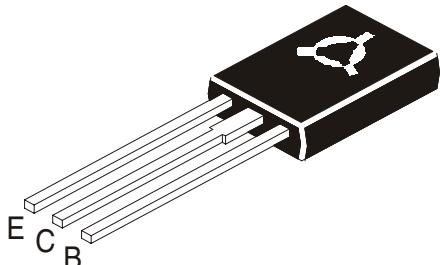


## NPN PLASTIC POWER TRANSISTORS

BF 469, BF471



TO126  
Plastic Package

### Complementary BF470, 472

### Video Applications in TV

#### ABSOLUTE MAXIMUM RATINGS (Ta=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	469	471	UNITS
Collector Base Voltage(open emitter)	$V_{CBO}$	>250	>300	V
Collector Emitter Voltage (open base)	$V_{CEO}$	>250		V
Collector Emitter Voltage ( $R_{BE} = 2.7\text{K}\Omega$ )	$V_{CER}$		<300	V
Emitter Base Voltage(open collector)	$V_{EBO}$		>5.0	V
Collector Current	$I_C$		<30	mA
Collector current (Peak Value)	$I_{CM}$		<100	mA
Total Power Dissipation@ $T_c=110^\circ\text{C}$	$P_{tot}$		<2	W
Junction Temperature	$T_j$		<150	°C
Storage Temperature	$T_{stg}$		-65 to +150	°C

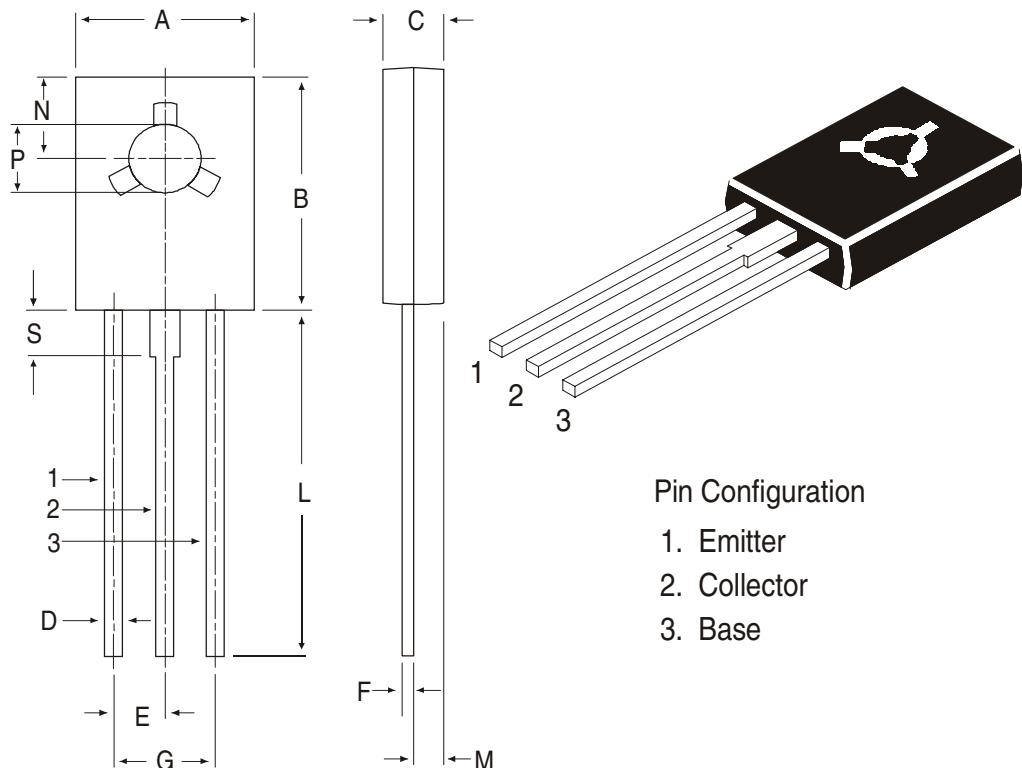
#### THERMAL RESISTANCE

From Junction to case	$R_{th(j-c)}$	20	K/W
From Junction to ambient	$R_{th(j-a)}$	100	K/W

#### ELECTRICAL CHARACTERISTICS (Ta=25°C Unless Otherwise Specified)

DESCRIPTION	SYMBOL	469	471	UNITS
Collector-Cut off Current				
	$I_{CBO}$	$I_E = 0, V_{CB} = 200\text{V}$	<100	nA
	$I_{CER}$	$R_{BE}=2.7\text{k}\Omega, V_{CE}=250\text{V}$		nA
	$I_{CER}$	$R_{BE}=2.7\text{k}\Omega, V_{CE}=200\text{V}, T_J=150^\circ\text{C}$	<10	$\mu\text{A}$
Emitter cut off Current	$I_{EBO}$	$V_{EB} = 5\text{V}, I_C = 0$	<10	nA
Breakdown Voltages	$V_{CEO}$	$I_C = 1\text{mA}, I_B = 0$	>250	V
	$V_{CER}$	$I_C = 1\text{uA}, R_{BE}=2.7\text{K}\Omega$		V
	$V_{CBO}$	$I_C = 10\text{uA}, I_E = 0$	>250	V
	$V_{EBO}$	$I_C = 0, I_E = 10\text{uA}$	>5.0	V
DC Current Gain	$h_{FE}$	$I_C = 25\text{mA}, V_{CE} = 20\text{V}$	>50	
Transition Frequency	$f_T$	$I_C = 10\text{mA}, V_{CE} = 10\text{V}$	>60	MHz
Feedback Capacitance $f=0.5\text{MHz}$	$C_{re}$	$I_C = 0, V_{CE} = 30\text{V}$	>1.8	pF

## TO-126 (SOT-32) Plastic Package



DIM	MIN	MAX
A	7.4	7.8
B	10.5	10.8
C	2.4	2.7
D	0.7	0.9
E	2.25 TYP.	
F	0.49	0.75
G	4.5 TYP.	
L	15.7 TYP.	
M	1.27 TYP.	
N	3.75 TYP.	
P	3.0	3.2
S	2.5 TYP.	

All dimensions in mm.

## Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-126 Bulk	500 pcs/polybag	340 gm/500 pcs	3" x 7.5" x 7.5"	2K	17" x 15" x 13.5"	32K	31 kgs
TO-126 Tube	50 pcs/tube	73 gm/50 pcs	3" x 3.7" x 21.5"	1K	19" x 19" x 19"	10K	15 kgs

### **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 is 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).

CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.



CDIL is a registered Trademark of  
**Continental Device India Limited**

C-120 Naraina Industrial Area, New Delhi 110 028, India.  
Telephone + 91-11-579 6150 Fax + 91-11-579 9569, 579 5290  
e-mail [sales@cdil.com](mailto:sales@cdil.com) [www.cdil.com](http://www.cdil.com)