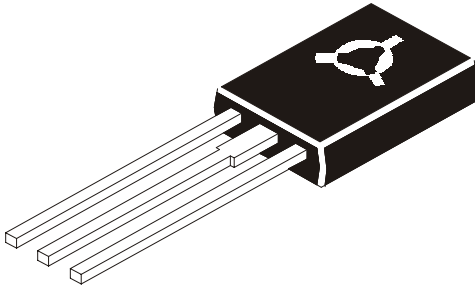


NPN DARLINGTON POWER SILICON TRANSISTOR

**BD 675
(BPL)
TO-126**



ABSOLUTE MAXIMUM RATINGS(Ta=25deg C)

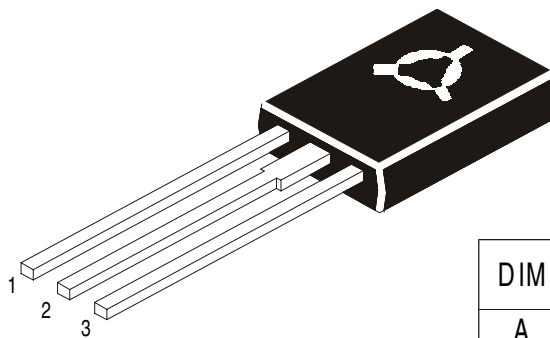
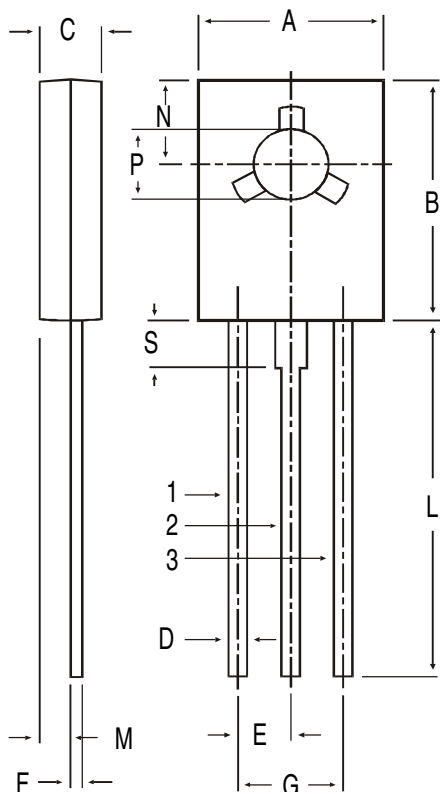
DESCRIPTION	SYMBOL	VALUE	UNIT
Collector -Base Voltage	VCBO	45	V
Collector -Emitter Voltage	VCEO	45	V
Emitter Base Voltage	VEBO	5.0	V
Collector Current	IC	4.0	A
Base Current	IB	0.1	A
Power Dissipation @ Tc=25 deg C	PD	40	W
Derate Above 25 deg C		0.32	W/deg C
Junction Temperature	Tj	150	deg C
Storage Temperature Range	Tstg	-55 to +150	deg C
Thermal Resistance			
Junction to Case	Rth(j-c)	3.13	deg C/W

ELECTRICAL CHARACTERISTICS (Ta=25 deg C Unless Specified)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Emitter (sus) Voltage	VCEO(sus)*	IC=50mA, IB=0	45	-	-	V
Collector Cut off Current	ICEO	VCE=23V, IB=0	-	-	500	uA
	ICBO	VCB=45V, IE=0	-	-	0.2	mA
Emitter Cut off Current	IEBO	Tc=100 deg C VCB=45V, IE=0	-	-	2.0	mA
		VBE=5V, IC=0	-	-	2.0	mA
DC Current Gain	hFE*	IC=500mA, VCE=5V	800	-	3200	
Collector Emitter Saturation Voltage	VCE(Sat)*	IC=1.5A, IB=30mA	-	-	2.5	V
Base Emitter on Voltage	VBE(on)*	IC=1.5A, VCE=3V	-	-	2.5	V
Gain Bandwidth Product	ft	IC=50mA, VCE=10V,	260	-	-	MHz

Pulse Test:-Pulse Width=300us, Duty Cycle=2%

TO-126 (SOT-32) Plastic Package



PIN CONFIGURATION

1. EMITTER
2. COLLECTOR
3. BASE

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	500 pcs/polybag	340 gm/500 pcs	3" x 7.5" x 7.5"	2.0K	17" x 15" x 13.5"	32.0K	31 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 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 www.cdil.com