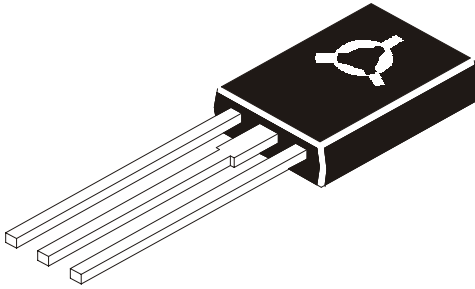


NPN DARLINGTON POWER SILICON TRANSISTOR

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



ABSOLUTE MAXIMUM RATINGS(Ta=25deg C)

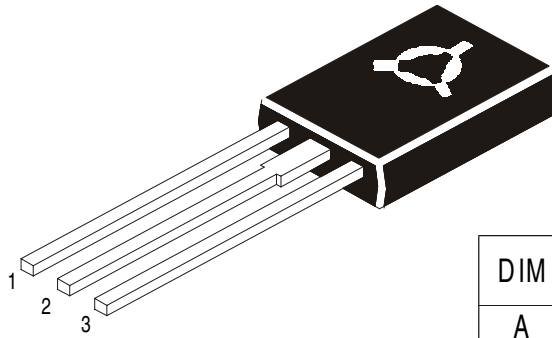
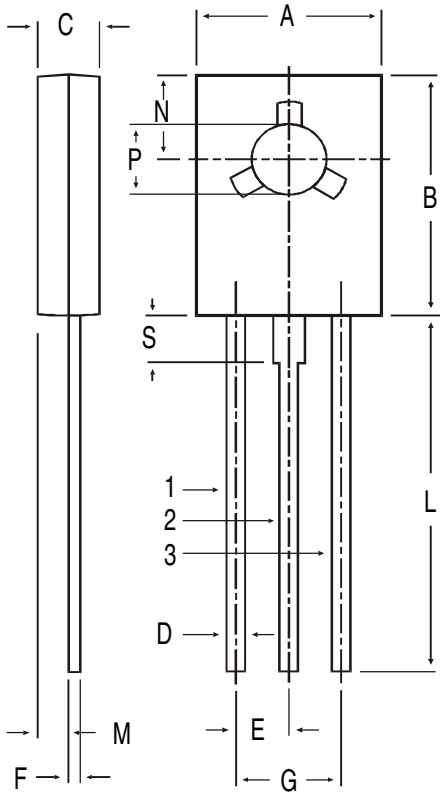
DESCRIPTION	SYMBOL	VALUE	UNIT
Collector -Base Voltage	VCBO	45	V
Collector -Emitter Voltage	VCEO	45	V
Emitter Base Voltage	VEBO	5.0	V
Collector Current	IC	4.0	A
Base Current	IB	0.1	A
Power Dissipation @ Tc=25 deg C	PD	40	W
Derate Above 25 deg C		0.32	W/deg C
Junction Temperature	Tj	150	deg C
Storage Temperature 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