

BD675 SERIES
NPN SILICON
POWER DARLINGTON TRANSISTOR



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DESCRIPTION:

The CENTRAL SEMICONDUCTOR BD675 Series types are NPN Silicon Darlington Power Transistors, available in the plastic TO-126 package, and are designed for audio and video output applications.

MARKING: FULL PART NUMBER



MAXIMUM RATINGS: (T _C =25°C)	SYMBOL	BD675	BD677	BD679	BD681	BD683	UNITS
		BD675A	BD677A	BD679A			
Collector-Base Voltage	V _{CB0}	45	60	80	100	120	V
Collector-Emitter Voltage	V _{CEO}	45	60	80	100	120	V
Emitter-Base Voltage	V _{EBO}			5.0			V
Continuous Collector Current	I _C			4.0			A
Continuous Base Current	I _B			100			mA
Power Dissipation	P _D			40			W
Operating and Storage							
Junction Temperature	T _J , T _{stg}			-65 to +150			°C
Thermal Resistance	θ _{JC}			3.13			°C/W

ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

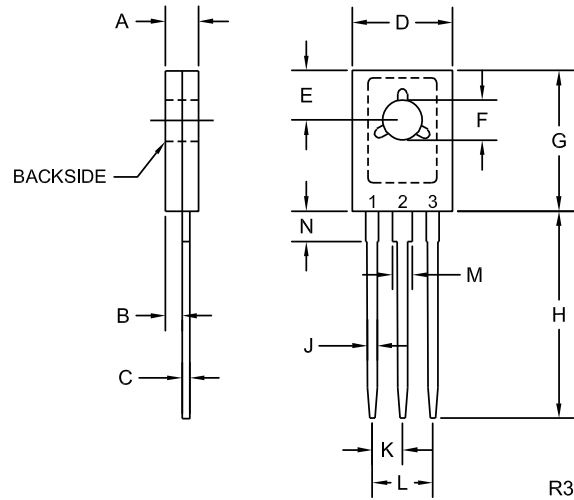
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _{CBO}	V _{CB} =Rated V _{CB0}		200	μA
I _{CBO}	V _{CB} =Rated V _{CB0} , T _C =100°C		2.0	mA
I _{CEO}	V _{CE} =½Rated V _{CEO}		500	μA
I _{EBO}	V _{EB} =5.0V		2.0	mA
BV _{CEO}	I _C =50mA (BD675, BD675A)	45		V
BV _{CEO}	I _C =50mA (BD677, BD677A)	60		V
BV _{CEO}	I _C =50mA (BD679, BD679A)	80		V
BV _{CEO}	I _C =50mA (BD681)	100		V
BV _{CEO}	I _C =50mA (BD683)	120		V
V _{CE(SAT)}	I _C =1.5A, I _B =30mA (Non-A)		2.5	V
V _{CE(SAT)}	I _C =2.0A, I _B =40mA (A)		2.8	V
V _{BE(ON)}	V _{CE} =3.0V, I _C =1.5A (Non-A)		2.5	V
V _{BE(ON)}	V _{CE} =3.0V, I _C =2.0A (A)		2.5	V
h _{FE}	V _{CE} =3.0V, I _C =1.5A (Non-A)	750		
h _{FE}	V _{CE} =3.0V, I _C =2.0A (A)	750		
h _{fe}	V _{CE} =3.0V, I _C =1.5A, f=1.0MHz	1.0		

R1 (14-June 2010)

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TO-126 CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Emitter
- 2) Collector
- 3) Base

MARKING:

FULL PART NUMBER

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.094	0.110	2.40	2.80
B	0.050		1.27	
C	0.015	0.030	0.38	0.75
D	0.291	0.335	7.40	8.50
E	0.148		3.75	
F	0.118	0.134	3.00	3.40
G	0.413	0.472	10.50	12.00
H	0.618		15.70	
J	0.024	0.035	0.62	0.90
K	0.089		2.25	
L	0.177		4.50	
M	0.045	0.055	1.14	1.40
N	0.083		2.10	

TO-126 (REV:R3)

R1 (14-June 2010)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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