



TR BD410;CDIL;TO126; tranzystor; NPN;1A;500V;20W;Pbf



Dane techniczne:

Nazwa: BD410

Typ tranzystora: bipolarny

Kierunek przewodnictwa: NPN

Prąd kolektora: 1A

Napięcie kolektor-emiter: 500V

Moc: 20W

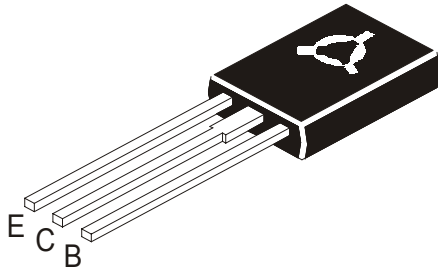
Montaż: przewlekany(THT)

Obudowa: TO126

Producent: CDIL

NPN EPITAXIAL SILICON POWER TRANSISTOR

BD410



**TO-126
Plastic Package**

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector -Base Voltage	V_{CBO}	500	V
Collector -Emitter Voltage	V_{CEO}	325	V
Emitter Base Voltage	V_{EBO}	5.0	V
Continuous Collector Current	I_C	1.0	A
Peak Collector Current	I_{CM}	1.5	
Total Power Dissipation @ $T_a=25\text{ }^\circ\text{C}$ @ $T_c=25\text{ }^\circ\text{C}$	P_{tot}	1.25 20	W
Storage Temperature Range	T_j, T_{stg}	- 55 to +125	$^\circ\text{C}$
Lead Temperature 1.6mm from Case for 10 Seconds.	T_L	260	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

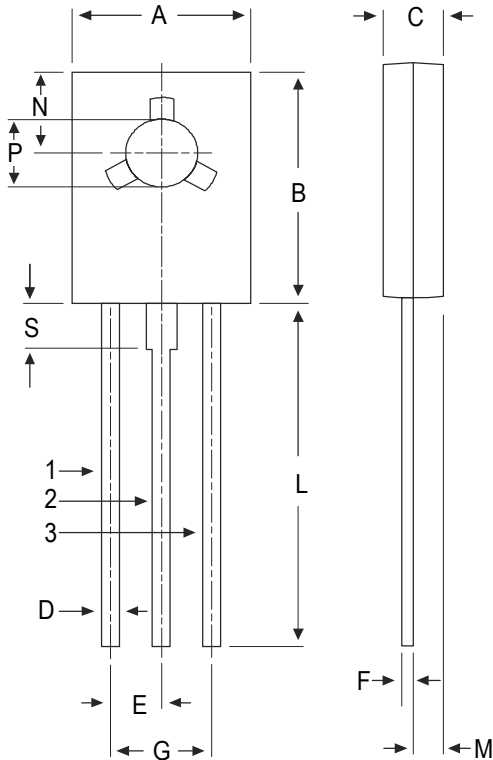
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Cut off Current	I_{CES}	$V_{CE}=300\text{V}, I_B=0$			100	μA
Collector -Base Voltage	V_{CBO}	$I_C=500\mu\text{A}, I_E=0$	500			V
Collector Emitter Voltage	V_{CEO}^*	$I_C=10\text{mA}, I_B=0$	325			V
Emitter Base Voltage	V_{EBO}	$I_E=50\mu\text{A}, I_C=0$	5			V
DC Current Gain	h_{FE}	$I_C=5\text{mA}, V_{CE}=10\text{V}$ $I_C=50\text{mA}, V_{CE}=10\text{V}$ $I_C=100\text{mA}, V_{CE}=10\text{V}$	25 30 20		240	
Base Emitter Saturation Voltage	$V_{BE(Sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$			1.5	V
Collector Emitter Saturation Voltage	$V_{CE(Sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$			0.5	V

Dynamic Characteristics

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Output Capacitance	C_{obo}	$I_E=0, V_{CB}=10\text{V}, f=1\text{MHz}$		5.5		pF
Input Capacitance	C_{ibo}	$I_E=0, V_{EB}=0.5\text{V}, f=1\text{MHz}$		90		pF

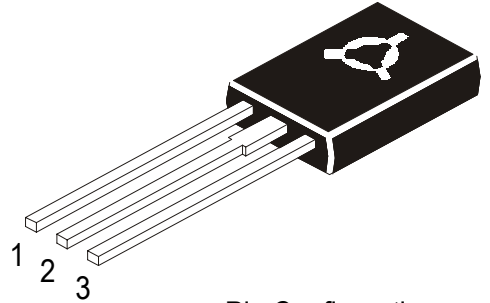
*Pulsed Test $t_p=300\mu\text{s}, \text{Duty Cycle}\leq 2\%$

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.	

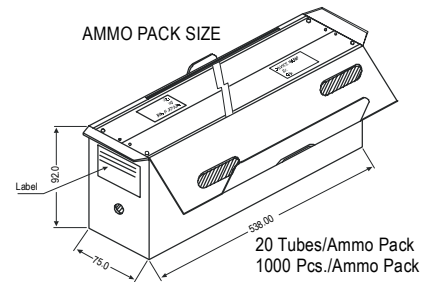
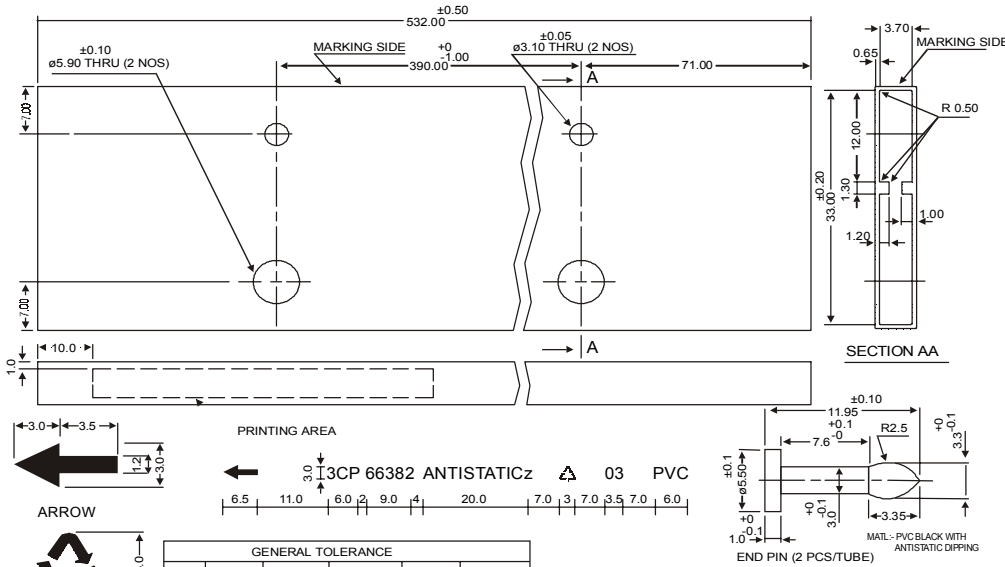
All dimensions in mm.



Pin Configuration

1. Emitter
2. Collector
3. Base

TO-126 TUBE PACKING



- Notes:
1. All print in black.
 2. All text in Helvetia medium font.

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 www.cdil.com