



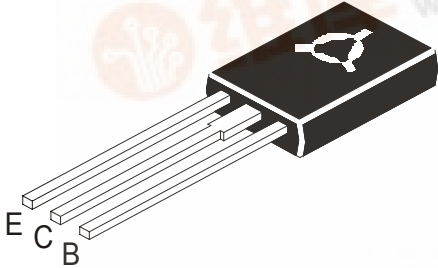
Continental Device India Limited  
An IS/ISO 9002 and IECQ Certified Manufacturer



IS/ISO 9002  
Lic# QSC/L- 000019.2

**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 @ $T_a=25^\circ C$ @ $T_c=25^\circ C$	$P_{tot}$	1.25 20	W
Storage Temperature Range	$T_j, T_{stg}$	- 55 to +125	$^\circ C$
Lead Temperature 1.6mm from Case for 10 Seconds.	$T_L$	260	$^\circ C$

**ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ C$  unless otherwise specified )**

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

**Dynamic Characteristics**

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

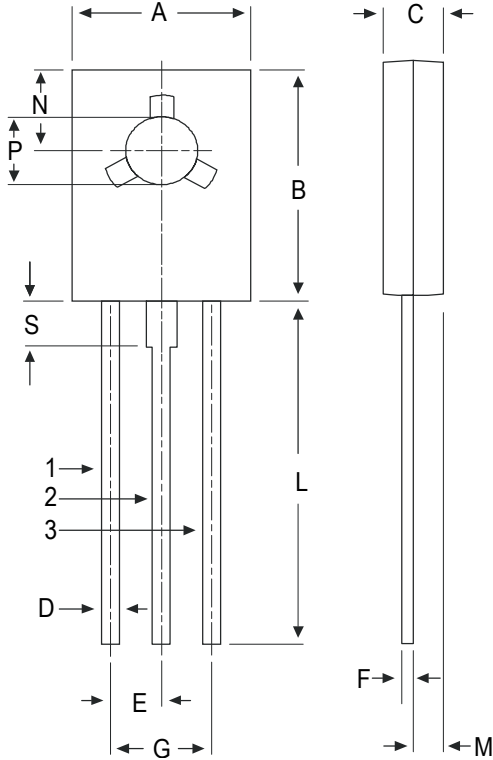
\*Pulsed Test  $t_p=300\mu s, Duty\ Cycle \leq 2\%$



**BD410**

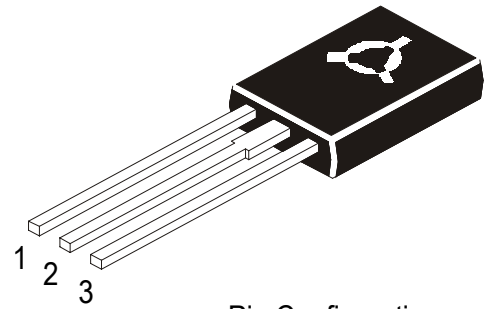
**TO-126  
Plastic Package**

**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.	

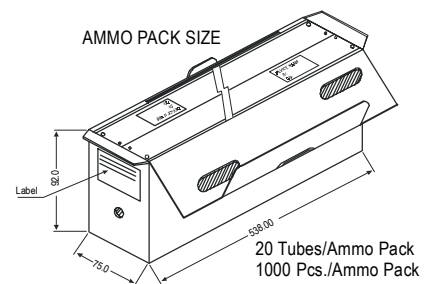
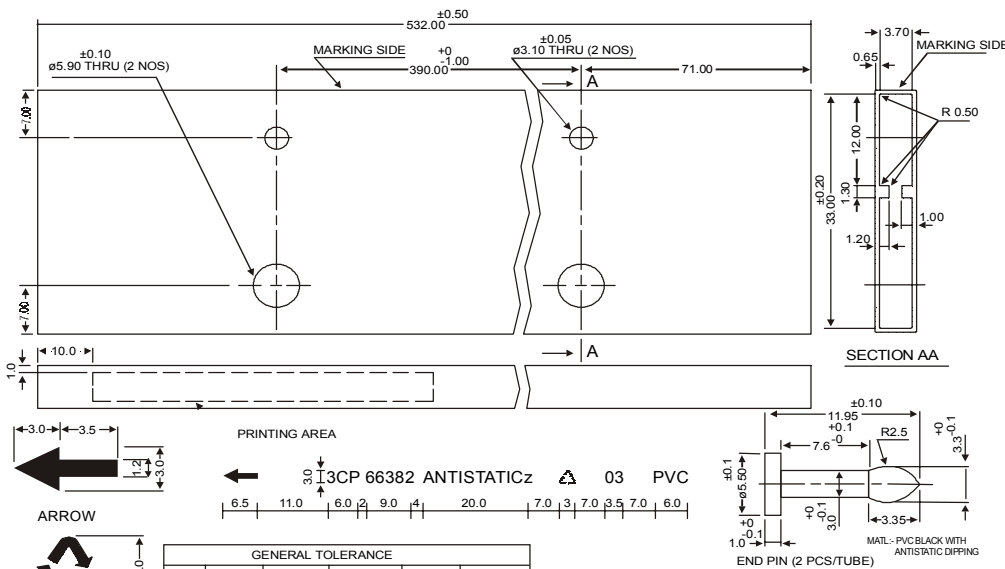
All dimensions in mm.



**Pin Configuration**

1. Emitter
2. Collector
3. Base

**TO-126 TUBE PACKING**



GENERAL TOLERANCE					
0 mm	0.01 mm	30.01 mm	120.01 mm	ABOVE 315 mm	ANGULAR
5 mm	0.02 mm	30 mm	120 mm	315 mm	
±0.1	±0.2	±0.3	±0.5	±0.8	±0' 30"

All dimensions in mm

**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**

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