

# New Jersey Semi-Conductor Products, Inc.

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**PNP BD132  
NPN BD131**

## SILICON PLANAR EPITAXIAL POWER TRANSISTORS

The BD132 are PNP transistors mounted in Jedec TO-126 plastic package.  
Medium power applications.  
NPN complements are BD131.

### ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings	Value	Unit
$-V_{CEO}$	Collector-Emitter Voltage	45	V
$-V_{CBO}$	Collector-Base Voltage	45	V
$-V_{EBO}$	Emitter-Base Voltage	4	V

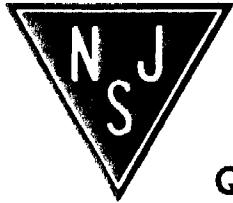
Symbol	Ratings	Value	Unit
$I_C$	Collector Current	3	A
	$-I_{CM}$	6	
$I_B$	Base current (peak value)	0.5	A
	Reverse base current (peak value)	0.5	
$P_T$	Total power Dissipation	@ $T_{mb} = 60^\circ\text{C}$	15 Watts

$T_J$	Junction Temperature	150	°C
$T_{Stg}$	Storage Temperature	-65 to +150	°C

### THERMAL CHARACTERISTICS

Symbol	Ratings	Value	Unit
$R_{thJ-mb}$	Thermal Resistance, Junction to mounting base	6	K/W

NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.



## PNP BD132 NPN BD131

### ELECTRICAL CHARACTERISTICS

TC=25°C unless otherwise noted

Symbol	Ratings	Test Condition(s)	Min	Typ	Mx	Unit
-I <sub>CBO</sub>	Collector cut-off current	I <sub>E</sub> =0, -V <sub>CB</sub> =40 V I <sub>E</sub> =0, -V <sub>CB</sub> =40 V, T <sub>j</sub> = 150°C	-	-	5	μA
-I <sub>EBO</sub>	Emitter cut-off current	I <sub>C</sub> =0, -V <sub>EB</sub> =3 V	-	-	5	μA
-V <sub>CE(SAT)</sub>	Collector-Emitter saturation Voltage	-I <sub>C</sub> =0.5 A, -I <sub>B</sub> =50 mA -I <sub>C</sub> =2.0 A, -I <sub>B</sub> =200 mA	-	-	0.3	V
-V <sub>BE(SAT)</sub>	Base-Emitter saturation Voltage	-I <sub>C</sub> =0.5 A, -I <sub>B</sub> =50 mA -I <sub>C</sub> =2.0 A, -I <sub>B</sub> =200 mA	-	-	0.7	V
h <sub>FE</sub>	DC Current Gain	-V <sub>CE</sub> =12 V, -I <sub>C</sub> =500mA -V <sub>CE</sub> =1 V, -I <sub>C</sub> =2 A	40	-	-	
			20	-	-	

	DIMENSIONS			
	mm		inches	
	min	max	min	max
A	7.4	7.8	0.295	0.307
B	10.5	10.8	0.413	0.425
C	2.4	2.7	0.094	0.106
D	0.7	0.9	0.027	0.035
E	2.2 typ.		0.087 typ.	
F	0.49	0.75	0.019	0.029
G	4.4 typ.		0.173 typ.	
H	2.54 typ.		0.100 typ.	
L	15.7 typ.		0.618 typ.	
M	1.2 typ.		0.047 typ.	
N	3.8 typ.		0.149 typ.	
P	3.0	3.2	0.118	0.126

Pin 1 :	Emitter
Pin 2 :	Collector
Case :	Base

### MECHANICAL DATA CASE TO-126

