



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

T_J	Junction Temperature	150	$^\circ\text{C}$
T_{Stg}	Storage Temperature	-65 to +150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

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

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ELECTRICAL CHARACTERISTICS

TC=25°C unless otherwise noted

Symbol	Ratings	Test Condition(s)	Min	Typ	Mx	Unit
-I_{CBO}	Collector cut-off current	$I_E=0, -V_{CB}=40\text{ V}$	-	-	5	μA
		$I_E=0, -V_{CB}=40\text{ V}, T_J=150^\circ\text{C}$	-	-	500	
-I_{EBO}	Emitter cut-off current	$I_C=0, -V_{EB}=3\text{ V}$	-	-	5	μA
-V_{CE(SAT)}	Collector-Emitter saturation Voltage	$-I_C=0.5\text{ A}, -I_B=50\text{ mA}$	-	-	0.3	V
		$-I_C=2.0\text{ A}, -I_B=200\text{ mA}$	-	-	1.2	
-V_{BE(SAT)}	Base-Emitter saturation Voltage	$-I_C=0.5\text{ A}, -I_B=50\text{ mA}$	-	-	0.7	V
		$-I_C=2.0\text{ A}, -I_B=200\text{ mA}$	-	-	1.5	
h_{FE}	DC Current Gain	$-V_{CE}=12\text{ V}, -I_C=500\text{ mA}$	40	-	-	
		$-V_{CE}=1\text{ V}, -I_C=2\text{ A}$	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
