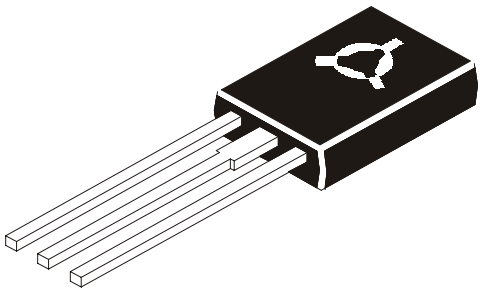
NPN/PNP SILICON EPITAXIAL POWER TRANSISTORS

BD131 NPN
BD132 PNP
TO-126



General Purpose, Medium Power Applications.

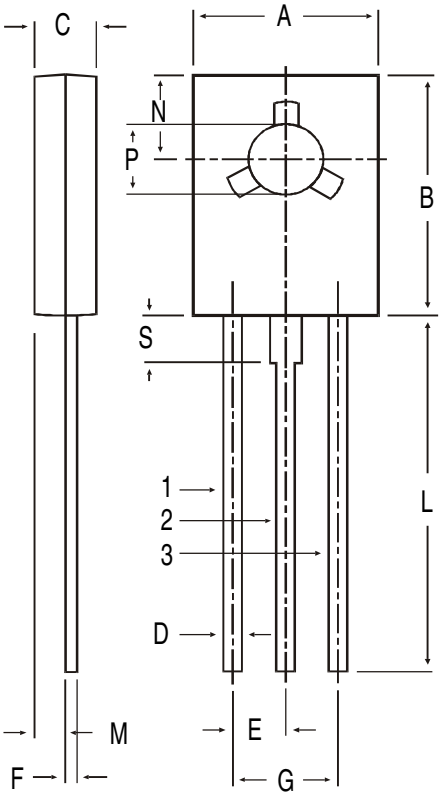
ABSOLUTE MAXIMUM RATINGS(Ta=25deg C)

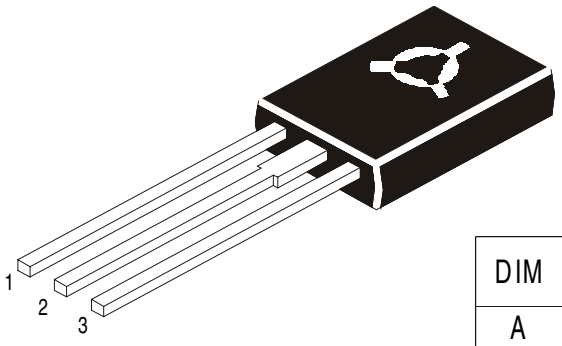
DESCRIPTION	SYMBOL	BD131	BD132	UNIT
Collector -Base Voltage	VCBO	70	45	V
Collector -Emitter Voltage	VCEO	45	45	V
Emitter Base Voltage	VEBO	6.0	4.0	V
Collector Current (d.c)	IC	3.0		A
Collector Current (Peak Value)	ICM	6.0		A
Base Current (Peak Value)	IBM	0.5		A
Reverse Base Current (Peak Value)	-IBM	0.5		A
Total Power Dissipation up to Tamb=60 deg C	Ptot	15		W
Junction Temperature	Tj	150		deg C
Storage Temperature Range	Tstg	-65 to +150		deg C
Thermal Resistance				
From Junction to Mounting Base	Rth(j-mb)	6.0		K/W

ELECTRICAL CHARACTERISTICS (Ta=25 deg C Unless Specified)

DESCRIPTION	SYMBOL	TEST CONDITION		MIN	MAX	UNIT
Collector Cut off Current	ICBO	VCB=50V, IE=0,	BD131	-	5.0	uA
		VCB=40V, IE=0,	BD132	-	5.0	uA
		Tj=150 deg C				
		VCB=50V, IE=0	BD131	-	500	uA
		VCB=40V, IE=0	BD132	-	500	uA
Emitter Cut off Current	IEBO	VEB=5V, IC=0	BD131	-	5.0	uA
		VEB=3V, IC=0	BD132	-	5.0	uA
Collector Emitter Saturation Voltage	VCE(Sat)	IC=0.5A, IB=50mA		-	0.3	V
		IC=2A, IB=200mA		-	0.7	V
Base Emitter Saturation Voltage	VBE(Sat)	IC=0.5A, IB=50mA		-	1.2	V
		IC=2A, IB=200mA		-	1.5	V
DC Current Gain	hFE	IC=0.5A, VCE=12V		40	-	
		IC=2A, VCE=1V		20	-	
Dynamic Characteristics						
Collector Capacitance	Cc	IE=0, VCB=5V,f=1MHz	BD131	-	60	pF
Transition Frequency	ft	VCE=5V, IC=0.25A, f=35MHz,Tamb=25 deg C		60	-	MHz
DC Current Gain Ratio of the Complementary Pairs	hFE1/hFE2	IC=0.5A, VCE=12V		-	1.2	

TO-126 (SOT-32) Plastic Package





PIN CONFIGURATION
1. EMITTER
2. COLLECTOR
3. BASE

All dimensions in mm.

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.	

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-126	500 pcs/polybag	340 gm/500 pcs	3" x 7.5" x 7.5"	2.0K	17" x 15" x 13.5"	32.0K	31 kgs

Disclaimer

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