



PNP BD912

POWER LINEAR AND SWITCHING APPLICATIONS.

The BD912 are PNP transistors mounted in Jedec TO-220 plastic package. They are intended for use in power linear and switching applications. NPN complements are BD911. Compliance to RoHS.

ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings	Value	Unit
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{CBO}	Collector-Base Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-5.0	V
I_C	Collector Current	-15	A
I_E	Emitter Current	-15	A
I_B	Base Current	-5	A
P_D	Total Device Dissipation @ $T_C = 25^\circ$	90	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{Stg}	Storage Temperature range	-65 to +150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

Symbol	Ratings	Value	Unit
$R_{thJ-case}$	Thermal Resistance, Junction - Case	70	K/W

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ELECTRICAL CHARACTERISTICS

TC=25°C unless otherwise noted

Symbol	Ratings	Test Condition(s)	Min	Typ	Max	Unit
I_{CEO}	Collector Cutoff Current	$-V_{CE}=50\text{ V}, I_B=0\text{V}$	-	-	-1	mA
I_{CBO}	Collector Cutoff Current	$-V_{CB}=100\text{ V}, I_E=0\text{V}$	-	-	-0.5	mA
		$-V_{CB}=100\text{ V}, I_E=0\text{V}, T_j=150^\circ\text{C}$			-5	
I_{EBO}	Emitter Cutoff Current	$-V_{BE}=5\text{ V}, I_C=0$	-	-	-1	mA
V_{CEO}	Collector Emitter Breakdown Voltage	$I_C=10\text{ m A}, I_B=0\text{V}$	-100	-	-	V
V_{BE}	Base Emitter Voltage (*)	$-I_C=5\text{ A}, -V_{CE}=4\text{ V}$	-	-	-1.5	V
h_{FE}	DC Current Gain (*)	$-I_C=0.5\text{ A}, -V_{CE}=4\text{ V}$	40	-	250	-
		$-I_C=5\text{ A}, -V_{CE}=4\text{V}$	15	-	-150	
		$-I_C=10\text{ A}, -V_{CE}=4\text{V}$	5	-	-	
$-V_{CE(SAT)}$	Collector-Emitter saturation Voltage (*)	$-I_C=5\text{ A}, -I_B=0.5\text{ A}$	-	-	1	V
		$-I_C=10\text{A}, -I_B=2.5\text{ A}$	-	-	3	
$-V_{BE(SAT)}$	Base-Emitter saturation Voltage (*)	$-I_C=10\text{A}, -I_B=2.5\text{ A}$	-	-	2.5	
f_T	Transition frequency	$-I_C=0.5\text{ A}, -V_{CE}=4\text{ V}$	3	-	-	MHz

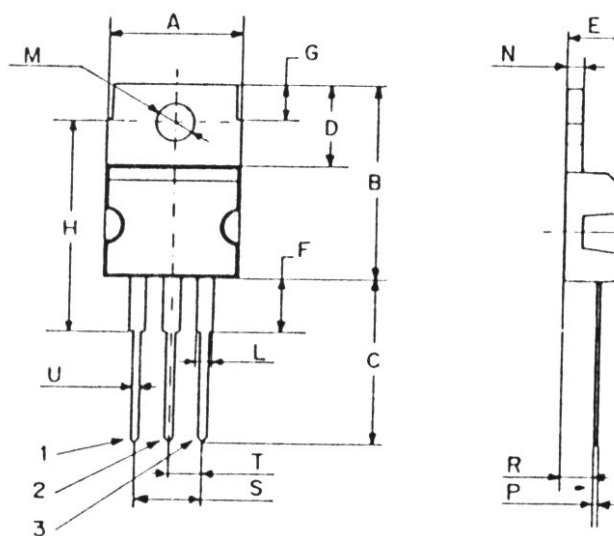
(*) Pulse conditions : $t_p < 300\ \mu\text{s}, \delta = 1.5\%$



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MECHANICAL DATA CASE TO-220

DIMENSIONS (mm)		
	Min.	Max.
A	9,90	10,30
B	15,65	15,90
C	13,20	13,40
D	6,45	6,65
E	4,30	4,50
F	2,70	3,15
G	2,60	3,00
H	15,75	17,15
L	1,15	1,40
M	3,50	3,70
N	-	1,37
P	0,46	0,55
R	2,50	2,70
S	4,98	5,08
T	2,49	2,54
U	0,70	0,90



Pin 1 :	Base
Pin 2 :	Collector
Pin 3 :	Emitter
Case :	Collector

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