

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	Watts
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

ELECTRICAL CHARACTERISTICS

$T_C=25^\circ\text{C}$ unless otherwise noted

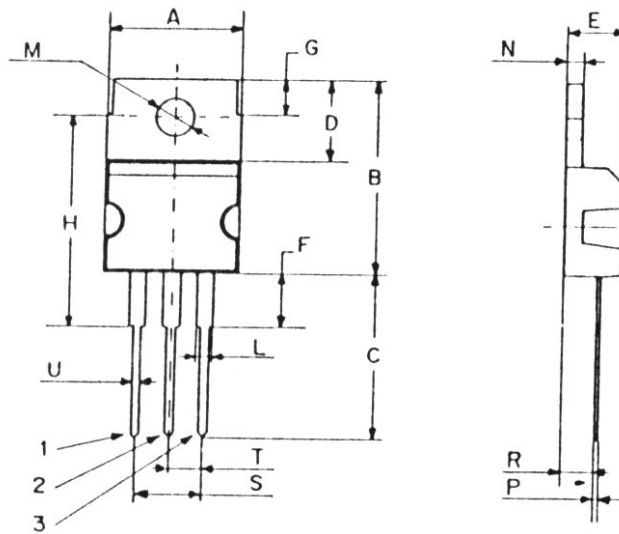
Symbol	Ratings	Test Condition(s)	Min	Typ	Mx	Unit
$-I_{CEO}$	Collector Cutoff Current	$-V_{CE}=50\text{ V}, I_B=0\text{ V}$	-	-	1	mA
$-I_{CBO}$	Collector Cutoff Current	$-V_{CB}=100\text{ V}, I_E=0\text{ V}$	-	-	0.5	mA
		$-V_{CB}=100\text{ V}, I_E=0\text{ V}, T_J=150^\circ\text{C}$			5	
$-I_{EBO}$	Emitter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

(1) 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
Package	Collector

Revised May 2012

Information furnished is believed to be accurate and reliable. However, CS assumes no responsibility for the consequences of use of such information nor for errors that could appear.

Data are subject to change without notice.