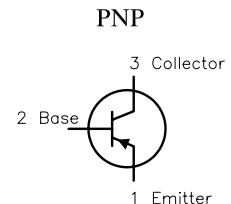
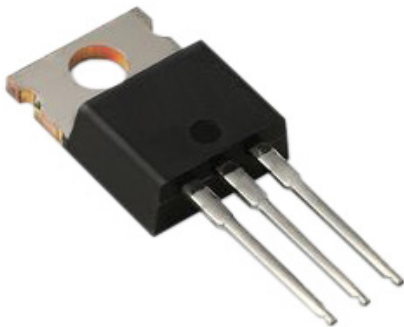


General Purpose Power Transistor



RoHS
Compliant



Description:

Plastic, PNP, TO-220 power transistor General purpose amplifier and switching applications

Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Collector-Emitter Voltage	V_{CEO}	100	V
Collector-Base Voltage	V_{CBO}	115	
Emitter-Base Voltage	V_{EBO}	5	
Continuous Collector Current	I_C	2	A
Base Current = I_B Total Device Dissipation at $T_c = +25^\circ\text{C}$ Derate above $+25^\circ\text{C} = 0.24\text{mW}/^\circ\text{C}$	P_D	36	W
Operating and Storage Junction Temperature Range	T_j, T_{stg}	-65 to +150	$^\circ\text{C}$

Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min.	Max.	Unit
-----------	--------	-----------------	------	------	------

OFF Characteristics

Collector - Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=30\text{mA}, I_B=0$ Note 1	100	-	V
Collector - Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=1\text{mA}, I_E=0$	115	-	V
Emitter - Base Breakdown Voltage	$V_{(BR)EBO}$	$I_C=1\text{mA}, I_E=0$	5	-	V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=60\text{V}, I_B=0$	-	0.2	mA
	I_{CES}	$V_{CE}=100\text{V}, V_{BE}=0$	-	0.3	
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$	-	1	

General Purpose Power Transistor



Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise specified)

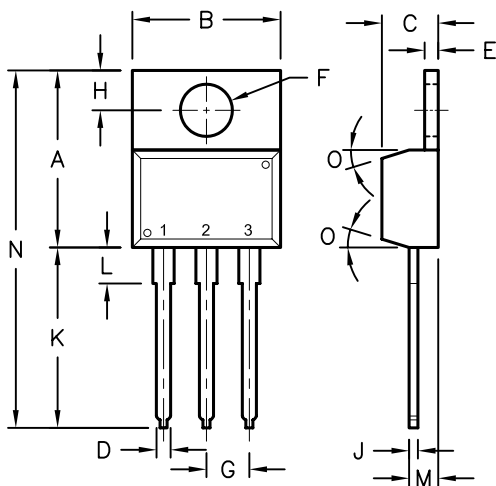
ON Characteristics (Note 1)

DC Current Gain	h_{FE}	$V_{CE}=4\text{V}, I_C=0.2\text{A}$	15	-	-
		$V_{CE}=4\text{V}, I_C=1\text{A}$	40	-	-
Collector - Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=1\text{A}, I_B=0.2\text{A}$	-	0.7	V
Base - Emitter On Voltage	$V_{BE(on)}$	$I_C=1\text{A}, V_{CE}=4\text{V}$		1.3	

Small-Signal Characteristics

Current Gain-Bandwidth Product	f_T	$V_{CE}=10\text{V}, I_C=0.2\text{A}, f=1\text{MHz}$	3	-	MHz
Small-Signal Current Gain	h_{fe}	$V_{CE}=10\text{V}, I_C=0.2\text{A}, f=1\text{MHz}$	20	-	-

Note 1. Pulse Test: Pulse Width $\leq 300\mu\text{s}$, Duty Cycle $\leq 2\%$.



Dimensions	Min.	Max.
A	14.42	16.51
B	9.63	10.67
C	3.56	4.83
D	-	0.9
E	1.15	1.4
F	3.75	3.88
G	2.29	2.79
H	2.54	3.43
J	-	0.56
K	12.7	14.73
L	2.8	4.07
M	2.03	2.92
N	-	31.24
O	7°	

Dimensions : Millimetres

Pin Configuration:

1. Emitter
2. Base
3. Collector

Part Number Table

Description	Part Number
Transistor, Plastic, PNP, 2A, 100V, TO-220	BD240C

Important Notice : This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell plc 2012.