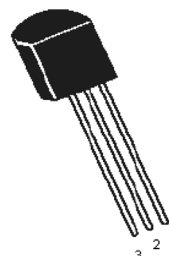


Transistor NPN, TO-92



Pin Configuration:

1. Emitter
2. Base
3. Collector

Description:

Silicon Planar Epitaxial Transistors.

General Purpose Transistors Best Suited for use in Driver and Output Stages of Audio Amplifier.

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$ unless specified otherwise)

Description	Symbol	Value	Unit
Collector Emitter Voltage	V_{CEO}	45	V
Collector Emitter Voltage	V_{CES}	50	
Emitter Base Voltage	V_{EBO}	5	
Collector Current Continuous	I_C	800	mA
Collector Current Peak	I_{CM}	1,000	
Base Current Peak	I_{BM}	200	
Base Current Continuous	I_B	100	
Base Current Peak	I_{BM}	200	
Power Dissipation at $T_a = 25^\circ\text{C}$ Derate Above 25°C	P_D	625 5	mW mW/ $^\circ\text{C}$
Operating and Storage Junction Temperature Range	T_j, T_{stg}	- 65 to +150	$^\circ\text{C}$

Thermal Resistance

Junction to Ambient in Free Air	$R_{th(j-a)}$	200	$^\circ\text{C}/\text{W}$
---------------------------------	---------------	-----	---------------------------

Transistor NPN, TO-92



Electrical Characteristics (T_a = 25°C unless specified otherwise)

Description	Symbol	Test Condition	Minimum	Maximum	Unit
Collector Emitter Voltage	V _{CEO}	I _C = 1mA, I _B = 0	45	-	V
Collector Emitter Voltage	V _{CES}	I _C = 100μA, I _E = 0	50	-	
Emitter Base Voltage	V _{EBO}	I _E = 10μA, I _C = 0	5		
Collector Cut off Current	I _{CBO}	V _{CB} = 20V, I _E = 0 V _{CB} = 20V, I _E = 0, T _j = 150°C	-	100 5	nA μA
Emitter Cut off Current	I _{EB0}	V _{EB} = 5V, I _C = 0	-	10	μA
Collector Emitter Saturation Voltage	*V _{CE (sat)}	I _C = 500mA, I _B = 50mA	-	0.7	V
Base Emitter On Voltage	*V _{BE (on)}	I _C = 500mA, V _{CE} = 1V	-	1.2	

*Pulse Test: Pulse Width ≤300ms, Duty Cycle ≤2%.

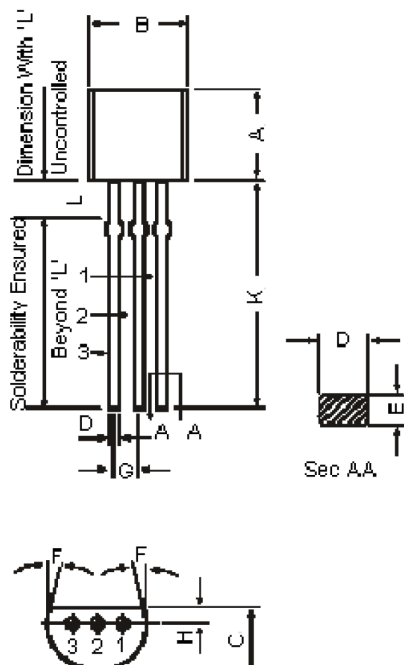
Electrical Characteristics (T_a = 25°C unless specified otherwise)

Description	Symbol	Test Condition	Minimum	Typical	Maximum	Unit
DC Current Gain	h _{FE}	I _C = 100mA, V _{CE} = 1V	100	400	-	-

Small Signal Characteristics

Transistors Frequency	f _T	I _C = 10mA, V _{CE} = 5V f = 35MHz NPN	-	200	-	MHz
Input Capacitance	C _{ib}	V _{BE} = 10V, I _E = 0, f = 1MHz NPN	-	5	-	pF

Transistor NPN, TO-92



Dimensions	Minimum	Maximum
A	4.32	5.33
B	4.45	5.2
C	3.18	4.19
D	0.41	0.55
E	0.35	0.5
F	5°	
G	1.14	1.4
H	1.2	1.53
K	12.7	-
L	1.982	2.082

Dimensions : Millimetres

Pin Configuration:

1. Emitter
2. Base
3. Collector

Part Number Table

Description	V _{CEO} (V)	V _{CBO} Maximum (V)	I _c (A)	h _{FE} Minimum at I _c = 2mA	f _T Minimum (MHz)	P _{tot} (mW)	Package	Part Number
Transistor, NPN, TO-92	45	50	0.5	100	60	800	TO-92	BC337

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.

