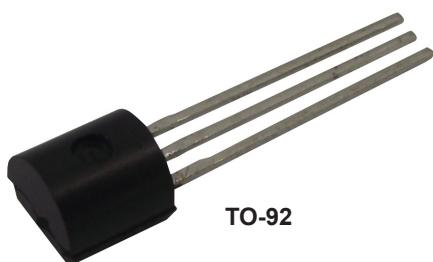


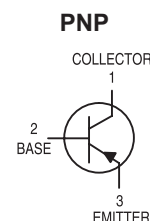
# PNP Epitaxial Planar Silicon High Voltage Transistor, 150V<sub>CEO</sub>, 600mA I<sub>c</sub>

**multicomp** PRO



TO-92

**RoHS  
Compliant**



## Absolute Max. Ratings T<sub>A</sub>=25°C unless otherwise noted

Parameter	Symbol	Value	Units
Collector-Emitter Voltage	V <sub>CEO</sub>	150	V
Collector-Base Voltage	V <sub>CB0</sub>	160	V
Emitter-Base Voltage	V <sub>EB0</sub>	5	V
Collector Current Continuous	I <sub>c</sub>	600	mA
Power Dissipation @T <sub>A</sub> = 25°C Derate Above 25°C	P <sub>D</sub>	625 5	mW mW/°C
Power Dissipation @T <sub>c</sub> = 25°C Derate Above 25°C	P <sub>D</sub>	1.5 12	W mW/°C
Operating and Storage Junction Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150	°C
<b>Thermal Resistance</b>			
Junction to Case	R <sub>th(j-c)</sub>	83.3	°C/W
Junction to Ambient	R <sub>th(j-a)</sub>	200	°C/W

## Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise noted

Parameter	Symbol	Test Condition	Min.	Type	Max.	Units
Collector -Emitter Voltage	V <sub>CEO</sub> *	I <sub>c</sub> = 1mA, I <sub>B</sub> = 0	150	-	-	V
Collector -Base Voltage	V <sub>CB0</sub>	I <sub>c</sub> = 100μA, I <sub>E</sub> = 0	160	-	-	V
Emitter -Base Voltage	V <sub>EB0</sub>	I <sub>E</sub> = 10μA, I <sub>c</sub> = 0	5	-	-	V
Collector-Cut off Current	I <sub>CB0</sub>	V <sub>CB</sub> = 160V, I <sub>E</sub> = 0	-	-	50	nA
Emitter Cut-off Current	I <sub>EB0</sub>	T <sub>A</sub> = 100°C V <sub>CB</sub> = 160V, I <sub>E</sub> = 0 V <sub>EB</sub> = 4V, I <sub>c</sub> = 0	- -	- -	50 50	μA nA
DC Current Gain	h <sub>FE</sub> *	I <sub>c</sub> = 1mA, V <sub>CE</sub> = 5V I <sub>c</sub> = 10mA, V <sub>CE</sub> = 5V I <sub>c</sub> = 50mA, V <sub>CE</sub> = 5V	50 60 50	- - -	- 240 -	
Collector Emitter Saturation Voltage	V <sub>CE(sat)</sub> *	I <sub>c</sub> = 10mA, I <sub>B</sub> = 1mA I <sub>c</sub> = 50mA, I <sub>B</sub> = 5mA	- -	- -	0.2 0.5	V
Base Emitter Saturation Voltage	V <sub>BE(sat)</sub> *	I <sub>c</sub> = 10mA, I <sub>B</sub> = 1mA I <sub>c</sub> = 50mA, I <sub>B</sub> = 5mA	- -	- -	1.0 1.0	V

\*Pulse Test: Pulse Width = 300μs, Duty Cycle = 2% T

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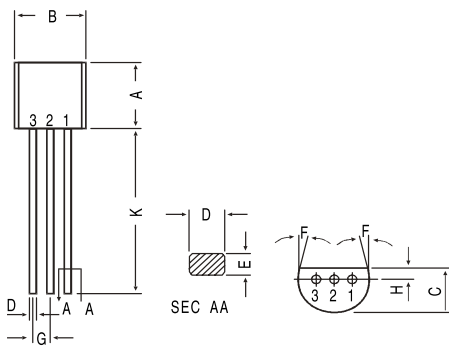
# PNP Epitaxial Planar Silicon High Voltage Transistor, 150V<sub>CEO</sub>, 600mA I<sub>c</sub>



## Dynamic Characteristics

Parameter	Symbol	Test Condition	Min.	Type	Max.	Units
Small Signal Current Gain	hfe	I <sub>c</sub> = 1mA, V <sub>CE</sub> = 10V, f = 1kHz	40	-	200	
Transition Frequency	f <sub>t</sub>	V <sub>CE</sub> = 10V, I <sub>c</sub> = 10mA, f = 100MHz	100	-	300	MHz
Output Capacitance	C <sub>obo</sub>	V <sub>CB</sub> = 10V, I <sub>E</sub> = 0, f = 1MHz	-	-	6	pF
Noise Figure	NF	V <sub>CE</sub> = 5V, I <sub>c</sub> = 250μA R = 1kΩ, f = 10Hz to 15.7kHz	-	-	8	dB

## TO-92 Plastic Package



PIN CONFIGURATION  
 1. COLLECTOR  
 2. BASE  
 3. EMITTER

Dim.	Min.	Max.
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 Deg.	
G	1.14	1.4
H	1.14	1.53
K	12.7	-

Dimensions : Millimetres

## Part Number Table

Description	Part Number
PNP Epitaxial Planar Silicon High Voltage Transistor, 150V, 600mA, TO-92	MP001172

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