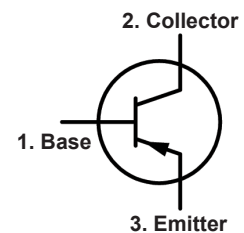
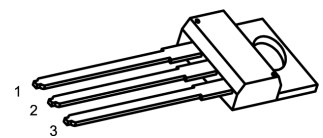
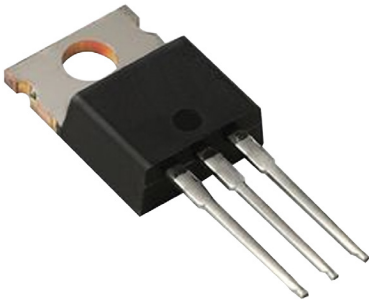


RoHS  
Compliant



**Pin Configuration:**

- 1. Emitter
- 2. Base
- 3. Collector

**Description:**

A Silicon epitaxial PNP transistor in a standard TO-220 type package designed for use in general-purpose amplifier and switching applications.

**Maximum Ratings:**

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CB}$	45	V
Collector-Emitter Voltage	$V_{CEO}$		
Emitter-Base Voltage	$V_{EB}$		
Collector Current -Continuous	$I_C$	4	A
Base Current	$I_B$	1	
Collector Power Dissipation ( $T_C = +25^\circ\text{C}$ ), Derate Above $25^\circ\text{C}$	$P_D$	40 0.32	W W/ $^\circ\text{C}$
Operating Junction Temperature Range	$T_J$	-65 to +150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$		
Thermal Resistance, Junction-to-Case	$R_{thJC}$	3.125	$^\circ\text{C/W}$

# Bipolar Transistor

**multicomp** PRO

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

Parameter	Symbol	Test Conditions	Min	Max	Unit
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### Off Characteristics

Collector-Emitter Saturation Voltage	$V_{CEO(SUS)}$	$I_C = 100\text{mA}, I_B = 0$ , Note 1	45	-	V
Collector Cutoff Current	$I_{CEO}$	$V_{CE} = 45\text{V}, I_B = 0$	-	0.1	mA
	$I_{CEX}$	$V_{CE} = 45\text{V}, V_{BE(off)} = 1.5\text{V}$		2	
		$V_{CE} = 45\text{V}, V_{BE(off)} = -1.5\text{V}, T_C = +125^\circ\text{C}$		2	
Emitter Cutoff Current	$I_{EBO}$	$V_{BE} = 5\text{V}, I_C = 0$		1	

### On Characteristics (Note 1)

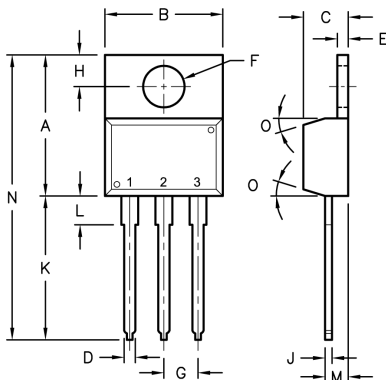
DC Current Gain	$h_{FE}$	$V_{CE} = 2\text{V}, I_C = 1.5\text{A}$	25	100	
		$V_{CE} = 2\text{V}, I_C = 4\text{A}$	10	-	
Collector-Emitter Saturation Voltage	$V_{CE(Sat)}$	$I_C = 4\text{A}, I_B = 1\text{A}$	-	1.4	V
Base-Emitter ON Voltage	$V_{BE(on)}$	$V_{CE} = 2\text{V}, I_C = 1.5\text{A}$		1.2	

### Dynamic Characteristics

Current Gain - Bandwidth Product	$f_T$	$V_{CE} = 4\text{V}, I_C = 0.1\text{A}, f = 1\text{MHz}$	2.5	-	MHz
Small - signal Current Gain	$h_{fe}$	$V_{CB} = 2\text{V}, I_C = 0.1\text{A}, f = 1\text{kHz}$	25		

#### Note:

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



Dim	A	B	C	D	E	F	G	H	J	K	L	M	N	O
Min.	14.42	9.63	3.65	-	1.15	3.75	2.29	2.54	-	12.7	2.8	2.03	-	7°
Max.	16.51	10.67	4.83	0.9	1.4	3.88	2.79	3.43	0.56	14.73	4.07	2.92	31.24	

Dimensions : Millimetres

### Part Number Table

Description	Part Number
Transistor, PNP, 4A, 45V, TO-220	2N6124

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