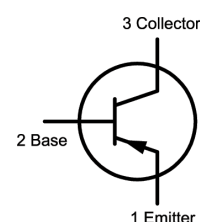
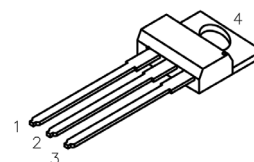
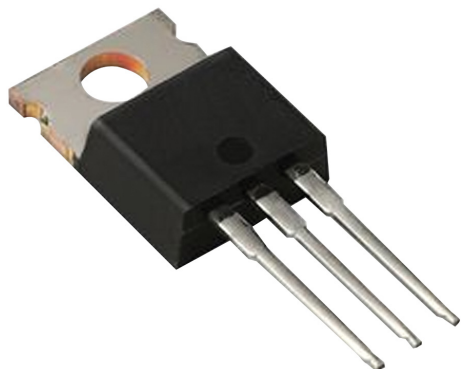


# Medium Power Transistor



RoHS  
Compliant



## Description:

The 2N6476, PNP General Purpose, medium power silicon transistor in a TO-220 type package designed for switching and amplifier applications. This device is especially designed for series and shunt regulators and as a driver and output stage of high-fidelity amplifiers.

## Features:

- Low Saturation Voltage

## Maximum Ratings:

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CBO}$	130	V
Collector-Emitter Voltage ( $R_{BB} = 100\Omega$ , $V_{BB} = 0$ )	$V_{CEX}$		
Collector-Emitter Voltage	$V_{CEO}$	120	
Emitter Base Current	$V_{EBO}$	5	
Continuous Collector Current ( $T_C \leq +106^\circ\text{C}$ )	$I_C$	4	A
Continuous Base Current ( $T_C \leq +130^\circ\text{C}$ )	$I_B$	120	mA
Total Device Dissipation - ( $T_C = +100^\circ\text{C}$ ), Derate Linearly Above $100^\circ\text{C}$	$P_D$	16 0.32	W W/ $^\circ\text{C}$
Total Device Dissipation - ( $T_C = +25^\circ\text{C}$ ), Derate Linearly Above $25^\circ\text{C}$		40 0.32	
Total Device Dissipation - ( $T_A = +25^\circ\text{C}$ ), Derate Linearly Above $25^\circ\text{C}$		1.8 0.0144	
Operating Junction Temperature Range	$T_{opr}$	-65 to +150	$^\circ\text{C}$
Storage Temperature Range,	$T_{stg}$		
Lead Temperature (During Soldering, 1/8" (3.17mm) from case, 10sec max)	$T_L$	+235	$^\circ\text{C}$

# Medium Power Transistor

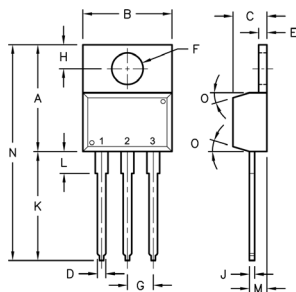


## Electrical Characteristics: ( $T_C = +25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Max	Unit
Collector Cutoff Current	$I_{CEO}$	$V_{CE} = 60\text{V}, I_B = 0$	-	1	mA
	$I_{CER}$	$V_{CE} = 120\text{V}, R_{BE} = 100\Omega$		0.1	
		$V_{CE} = 120\text{V}, R_{BE} = 100\Omega, TC = +100^\circ\text{C}$		2	
	$I_{CEX}$	$V_{CE} = 120\text{V}, V_{BE} = -1.5\text{V}$		0.1	
		$V_{CE} = 120\text{V}, V_{BE} = -1.5\text{V}, TC = +100^\circ\text{C}$		2	
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = -5\text{V}, I_C = 0$		1	
Collector-Emitter Sustaining Voltage	$V_{CEO(SUS)}$	$I_C = 100\text{mA}, I_B = 0, (\text{Note } 2)$	120	-	V
	$V_{CER(SUS)}$	$R_{BE} = 100\Omega, I_C = 100\text{mA}, (\text{Note } 2)$	130		
DC Current Gain	$h_{FE}$	$I_C = 1.5\text{A}, V_{CE} = 4\text{V}, (\text{Note } 1)$	15	150	-
		$I_C = 4\text{A}, V_{CE} = 2.5\text{V}, (\text{Note } 1)$	2	-	
Base-Emitter Voltage	$V_{BE(on)}$	$I_C = 1.5\text{A}, V_{CE} = 4\text{V}, (\text{Note } 1)$	-	2	V
		$I_C = 4\text{A}, V_{CE} = 2.5\text{V}, (\text{Note } 1)$		3.5	
Collector-Emitter Sustaining Voltage	$V_{CE(Sat)}$	$I_C = 1.5\text{A}, I_B = 150\text{mA}, (\text{Note } 1)$		1.2	
		$I_C = 4\text{A}, I_B = 2\text{A}, (\text{Note } 1)$		2.5	
Small-Signal Forward Current Transfer Ratio	$h_{fe}$	$V_{CE} = 4\text{V}, I_C = 500\text{mA}, f = 1\text{MHz}$	5	-	-
Gain bandwidth Product	$f_T$	$V_{CE} = 4\text{V}, I_C = 500\text{mA}$	4		
Collector -Base Capacitance	$C_{obo}$	$V_{CB} = 10\text{V}, I_C = 0, f = .1\text{MHz}$	-	250	pF

### Note:

1. Pulse Width = 300 $\mu$ s, Duty Cycle  $\leq 2\%$



### Pin Configuration:

1. Base
2. Collector
3. Emitter
4. Collector

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, 120V, TO-220	2N6476

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