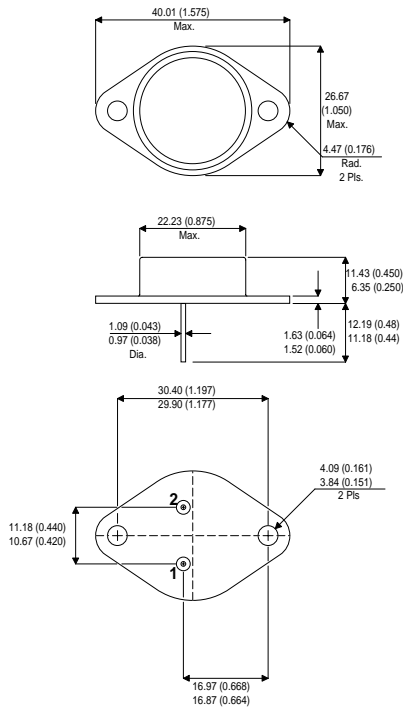


MECHANICAL DATA

Dimensions in mm(inches)



TO3 (TO-204AA)

PIN 1 — Base PIN 2 — Emitter Case is Collector.

ABSOLUTE MAXIMUM RATINGS ($T_{case} = 25^{\circ}C$ unless otherwise stated)

V_{CBO}	Collector – Base Voltage ($I_E = 0$)	- 80V
$V_{CEO(sus)}$	Collector – Emitter Voltage ($I_B = 0$)	- 80V
V_{EBO}	Emitter – Base Voltage ($I_C = 0$)	- 7V
I_C	Collector Current	- 10A
I_B	Base Current	- 4A
P_{TOT}	Total Power Dissipation at $T_{case} = 25^{\circ}C$	150W
T_{stg}	Storage Temperature	65 to 200°C
T_j	Junction Temperature	200°C

THERMAL CHARACTERISTICS

$R_{\theta JC}$	Thermal Resistance, Junction to Case	1.17 °C/W
-----------------	--------------------------------------	-----------

Semelab Plc reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by Semelab is believed to be both accurate and reliable at the time of going to press. However Semelab assumes no responsibility for any errors or omissions discovered in its use. Semelab encourages customers to verify that datasheets are current before placing orders.

**PNP SILICON EPITAXIAL BASE
POWER TRANSISTORS**

APPLICATIONS

Linear Power and Switching Applications

ELECTRICAL CHARACTERISTICS ($T_{\text{case}} = 25^{\circ}\text{C}$ unless otherwise stated)

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
$V_{\text{CEO(sus)}}^*$	Collector - Emitter Sustaining Voltage $I_{\text{C}} = -200\text{mA}$ $I_{\text{B}} = 0$	-80			V
$V_{\text{CE(sat)}}^*$	Collector - Emitter Saturation Voltage $I_{\text{C}} = -5\text{A}$ $I_{\text{B}} = -0.5\text{A}$	-1			
$V_{\text{BE(on)}}^*$	Base Emitter Voltage $I_{\text{C}} = -5\text{A}$ $V_{\text{CC}} = -2\text{V}$			-1.8	V
	$I_{\text{C}} = -10\text{A}$ $V_{\text{CC}} = -4\text{V}$			-4	
I_{EBO}	Emmitter Cut-off Current $I_{\text{C}} = 0$ $V_{\text{EB}} = 7\text{V}$			-5	mA
I_{CEX}	Collector Cut-off Current $V_{\text{BE}} = -1.5\text{V}$ $V_{\text{CE}} = -80\text{V}$			-1	mA
		$T_{\text{c}} = 150^{\circ}\text{C}$			
h_{FE}^*	DC Current Gain $I_{\text{C}} = 1\text{A}$ $V_{\text{CE}} = 2\text{V}$	50		180	—
	$I_{\text{C}} = 3\text{A}$ $V_{\text{CE}} = 2\text{V}$	30			
	$I_{\text{C}} = 10\text{A}$ $V_{\text{CE}} = 4\text{V}$	5			
f_{t}	Transition Frequency $I_{\text{C}} = -0.5\text{A}$ $V_{\text{CE}} = -10\text{V}$ $f = 1\text{MHz}$	4			MHz

* Pulsed duration = 300 μs , duty cycle = 1.5%