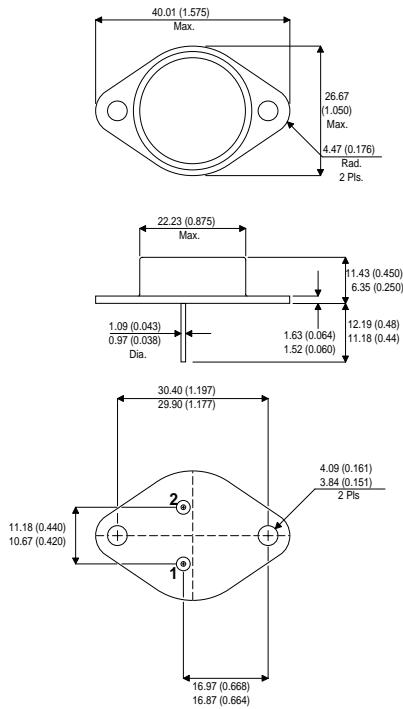


**MECHANICAL DATA**

Dimensions in mm(inches)



**TO3**

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

**PNP SILICON EPITAXIAL BASE  
POWER TRANSISTORS**

**APPLICATIONS**

Linear Power and Switching Applications

**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
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**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 $I_{\text{C}} = 5\text{A}$ $I_{\text{B}} = 0.5\text{V}$	-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	
$I_{\text{EBO}}$	Emmitter Cut-off Current $I_{\text{C}} = 0$ $V_{\text{EB}} = 7\text{V}$			-5	mA
$I_{\text{CEX}}$	Collector Cut-off Current $V_{\text{BE}} = 1.5\text{V}$ $V_{\text{CE}} = 80$			-1	mA
		$T_{\text{c}} = 150^{\circ}\text{C}$			
$h_{\text{FE}}^*$	DC Current Gain $I_{\text{C}} = 1\text{A}$ $V_{\text{CE}} = 2\text{V}$	50		150	—
	$I_{\text{C}} = 3\text{A}$ $V_{\text{CE}} = 2\text{V}$	30		120	
	$I_{\text{C}} = 10\text{A}$ $V_{\text{CE}} = 4\text{V}$	5			
$f_{\text{t}}$	Transition Frequency $I_{\text{C}} = 0.5\text{A}$ $V_{\text{CE}} = 10\text{V}$ $f = 1\text{MHz}$	4			MHz

\* Pulsed duration = 300  $\mu\text{s}$ , duty cycle = 1.5%