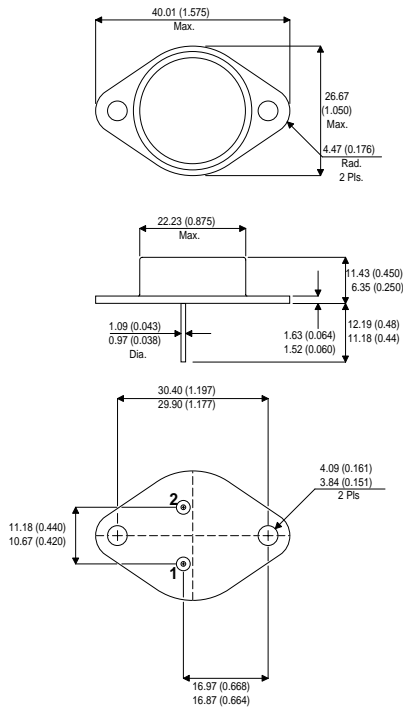


MECHANICAL DATA

Dimensions in mm(inches)

**PNP SILICON EPITAXIAL BASE
POWER TRANSISTORS**



APPLICATIONS

Linear Power and Switching Applications

TO3

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
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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_{EBO} Emmiter Cut-off Current	$I_{\text{C}} = 0$ $V_{\text{EB}} = 7\text{V}$			-5	mA
I_{CEX} Collector Cut-off Current	$V_{\text{BE}} = 1.5\text{V}$ $V_{\text{CE}} = 80$ $T_{\text{c}} = 150^{\circ}\text{C}$			-1	mA
				-5	
h_{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_{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%