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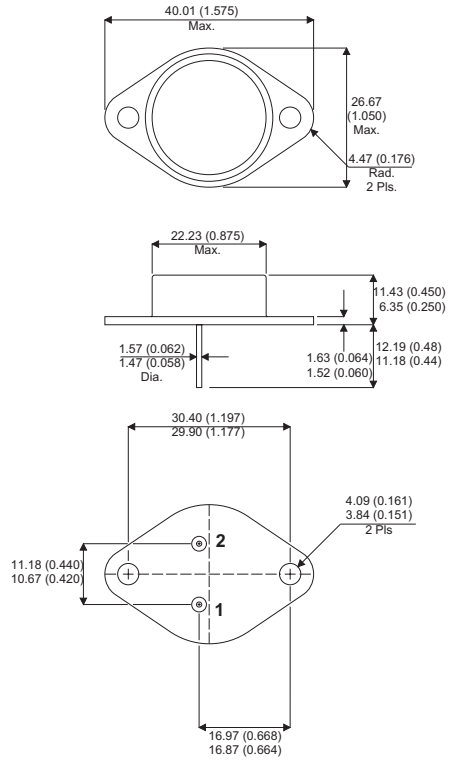
MECHANICAL DATA
Dimensions in mm



TO3 (T0-204AA)

Pin 1 – Base Pin 2 – Emitter Case – Collector

HIGH CURRENT NPN SILICON TRANSISTOR

FEATURES

- HIGH SWITCHING CURRENTS
- HIGH RELIABILITY
- CECC SCREENING OPTIONS
- SPACE QUALITY LEVELS OPTIONS
- JAN LEVEL SCREENING OPTIONS

APPLICATIONS

- SWITCHING REGULATORS
- LINEAR APPLICATIONS

ABSOLUTE MAXIMUM RATINGS (T_{case} = 25°C unless otherwise stated)

V_{CBO}	Collector – Base Voltage	160V
V_{CEO}	Collector – Emitter Voltage	125V
V_{EBO}	Emitter – Base Voltage	10V
I_C	Collector Current	25A
I_B	Base Current	6A
P_{tot}	Total Dissipation at T_{case} = 25°C	175W
T_{stg}	Storage Temperature	–65 to +200°C
T_J	Maximum Operating Junction Temperature	200°C
$R_{\theta JC}$	Thermal Resistance (junction-case)	1°C/W

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ELECTRICAL CHARACTERISTICS (T_{case} = 25°C unless otherwise stated)

PARAMETER		TestConditions	Min.	Typ.	Max.	Unit
I_{CBO}	Collector Base Cut–Off Current	V_{CB} = 120V I_E = 0			1	mA
I_{CER}	Collector Emitter Cut–Off Current	V_{CE} = 80V T_C = 100°C R_{BE} = 10Ω			10	
I_{EBO}	Emitter Base Cut–Off Current	V_{EB} = 10V I_C = 0A			0.5	
$V_{CEO(sus)}$*	Collector Emitter Sustaining Voltage	I_C = 100mA	125			V
$V_{(BR)CBO}$*	Collector Base Breakdown Voltage	I_C = 5mA	160			
$V_{(BR)EBO}$*	Base Emitter Breakdown Voltage	I_E = 5mA	10			
$V_{CE(sat)}$*	Collector Emitter Saturation Voltage	I_C = 10A I_B = 1A		0.5	1.4	
$V_{BE(sat)}$*	Base Emitter Saturation Voltage	I_C = 10A I_B = 1A		1.4	2.0	
h_{FE}	DC Current Gain	I_C = 10A V_{CE} = 4V I_C = 20A V_{CE} = 4V T_C = -30°C I_C = 10A V_{CE} = 4V	20 10	15	60	—
f_T	Transition Frequency	I_C = 1A V_{CE} = 15V f = 10MHz	7			MHz
t_{on}	Turn On Time	I_C = 15A I_{B1} = 1.5A			1	µS
t_{off}	Turn Off Time	I_C = 15A I_{B1} = -I_{B2} = 1.5A			2	

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