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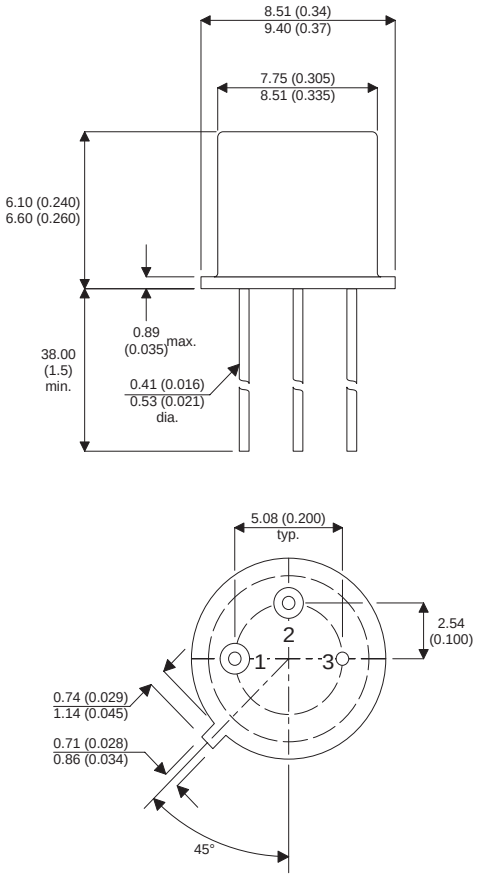
MECHANICAL DATA
Dimensions in mm (inches)



TO-5 (TO-205AA)

Underside View

PIN 1 – Emitter PIN 2 – Base PIN 3 – Collector

HIGH VOLTAGE PNP TRANSISTOR

FEATURES

- **LOW SATURATION VOLTAGE**
- **LOW LEAKAGE AT HIGH TEMPERATURE**
- **CECC SCREENING OPTIONS**
- **SPACE QUALITY LEVELS OPTIONS**
- **JAN LEVEL SCREENING OPTIONS**

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

V_{CER}	Collector-Base Voltage (R_{BE} = 1K)	500V
V_{CEO}	Collector-Emitter Voltage (IB = 0V)	450V
V_{CBO}	Collector Base Voltage (IE = 0V)	500V
I_C	Collector Current	1A
I_B	Base Current	0.5A
P_{tot}	Total Dissipation @ Tamb = 25°C	2W
	Derate Above 100°C	20mW/°C
T_j	Operating And Storage Junction Temperature	-65 to 200°C

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

Parameter		Test Conditions		Min.	Typ.	Max.	Unit
BV_{CEO}*	Collector Emitter Breakdown Voltage	I_C=50mA		450			V
BV_{CER}*	Collector Emitter Breakdown Voltage	I_C=100µA	R_{BE} = 1K	500			
BV_{CBO}	Collector Base Breakdown Voltage	I_C=100µA		500			
BV_{EBO}	Emitter Base Breakdown Voltage	I_E=20µA		6			
I_{CBO}	Collector Cutoff Current	V_{CB}=500V				500	nA
I_{EBO}	Emitter Cutoff Current	V_{EB}=4V				250	
h_{FE}*	DC Current Gain	I_C=1mA	V_{CE}=10V	20		200	—
		I_C=25mA	V_{CE}=10V	40		250	
		I_C=100mA	V_{CE}=15V	20		200	
$V_{CE(SAT)}$*	Collector Emitter Saturation Voltage	I_C=25mA	I_B=2.5mA			3.0	V
$V_{BE(SAT)}$*	Base Emitter Saturation Voltage	I_C=25mA	I_B=2.5mA			1.0	
f_T	Current Gain Bandwidth Product	I_C=10mA f=5MHz	V_{CE} =20V	20			MHz

SWITCHING TIMES (T_{case} = 25°C unless otherwise stated)

Parameter		Test Conditions	Min.	Typ.	Max.	Unit
t_d	Delay Time	V_{CC}=150V I_C=100mA I_{B1}=I_{B2}=10mA			700	ns
t_r	Rise Time				1500	
t_s	Storage Time				3	µS
t_f	Fall Time				200	ns

* Pulsed: Pulse Duration = 300µs, duty cycle = 1.5%

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