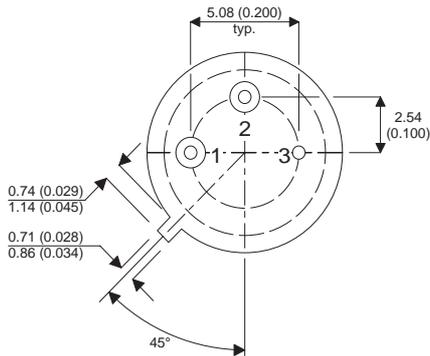
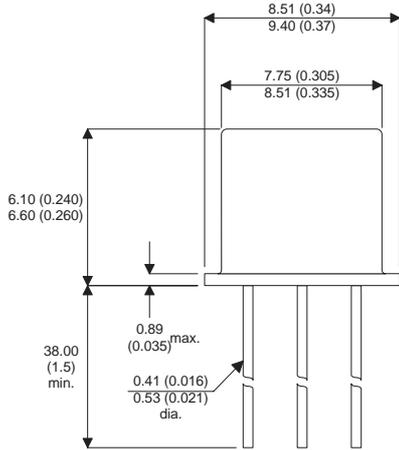


MECHANICAL DATA

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

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

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.

ELECTRICAL CHARACTERISTICS ($T_{case} = 25^{\circ}C$ 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	$I_C=100\mu A$ $R_{BE} = 1K$	500			
BV_{CBO} Collector Base Breakdown Voltage	$I_C=100\mu A$	500			
BV_{EBO} Emitter Base Breakdown Voltage	$I_E=20\mu A$	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	$I_C=10mA$ $V_{CE} =20V$ $f=5MHz$	20			MHz

SWITCHING TIMES ($T_{case} = 25^{\circ}C$ 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 = 300 μs , duty cycle = 1.5%