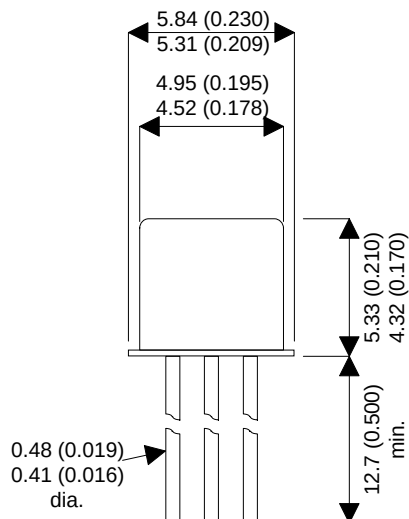
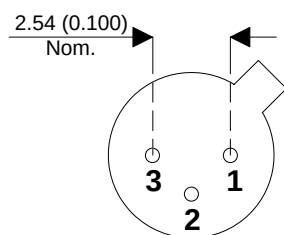


MECHANICAL DATA

Dimensions in mm (inches)



HIGH VOLTAGE PNP SILICON TRANSISTOR



TO-18 PACKAGE

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

ABSOLUTE MAXIMUM RATINGS ($T_C = 25^\circ\text{C}$ unless otherwise stated)

V_{CBO}	Collector – Base Voltage	200V
V_{CEO}	Collector – Emitter Voltage	200V
V_{EBO}	Emitter – Base Voltage	5V
I_C	Continuous Collector Current	0.5A
P_D	Total Device Dissipation	$T_{AMB} = 25^\circ\text{C}$ 0.5W
		Derate above 25°C 2.86mW/ $^\circ\text{C}$
P_D	Total Device Dissipation	$T_C = 25^\circ\text{C}$ 2.5W
		Derate above 25°C 14.3mW/ $^\circ\text{C}$
T_J, T_{STG}	Operating Junction & Storage Temperature Range	-65 to 200°C
$R_{\theta JC}$	Thermal Resistance, Junction – Case	70 $^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise stated)

Parameter		Test Conditions		Min.	Typ.	Max.	Unit
OFF CHARACTERISTICS							
V _{(BR)CEO}	Collector – Emitter Breakdown Voltage	I _C = 10mA	I _B = 0	200			V
V _{(BR)CBO}	Collector – Base Breakdown Voltage	I _C = 100μA	I _E = 0	200			
V _{(BR)EBO}	Emitter – Base Breakdown Voltage	I _E = 100μA	I _C = 0	6			
I _{CBO}	Collector Cut-off Current	V _{CB} = 150V	I _E = 0			50	nA
I _{CEO}	Collector Cut-off Current	V _{CE} = 150V	I _B = 0			500	
I _{EBO}	Emitter Cut-off Current	V _{BE} = 5V	I _C = 0			50	
ON CHARACTERISTICS							
h _{FE}	DC Current Gain	V _{CE} = 1V	I _C = 0.1mA	20			—
		V _{CE} = 10V	I _C = 1mA	30			
		V _{CE} = 10V	I _C = 10mA	35			
		V _{CE} = 10V	I _C = 30mA	35		150	
V _{CE(sat)}	Collector – Emitter Saturation Voltage	I _C = 10mA	I _B = 1mA			0.3	V
		I _C = 30mA	I _B = 3mA			1.3	
V _{BE(sat)}	Base – Emitter Saturation Voltage	I _C = 10mA	I _B = 1mA			0.8	V
		I _C = 30mA	I _B = 3mA			0.9	
DYNAMIC CHARACTERISTICS							
f _t	Current Gain Bandwidth Product	I _C = 20mA f = 20MHz	V _{CE} = 20V	50	110	200	MHz
C _{ob}	Output Capacitance	I _E = 0 f = 1MHz	V _{CB} = 20V		3.5		pF
C _{ib}	Input Capacitance	I _C = 0 f = 1MHz	V _{EB} = 0.5V		45		
t _{on}	Turn–On Time	I _{B1} = 10mA V _{CC} = 100V	I _C = 50mA		100		ns
t _{off}	Turn–Off Time	I _{B2} = 10mA V _{CC} = 100V	I _C = 50mA		400		

* Pulse Test: $t_p = 300\mu\text{s}$, $\delta \leq 1\%$.