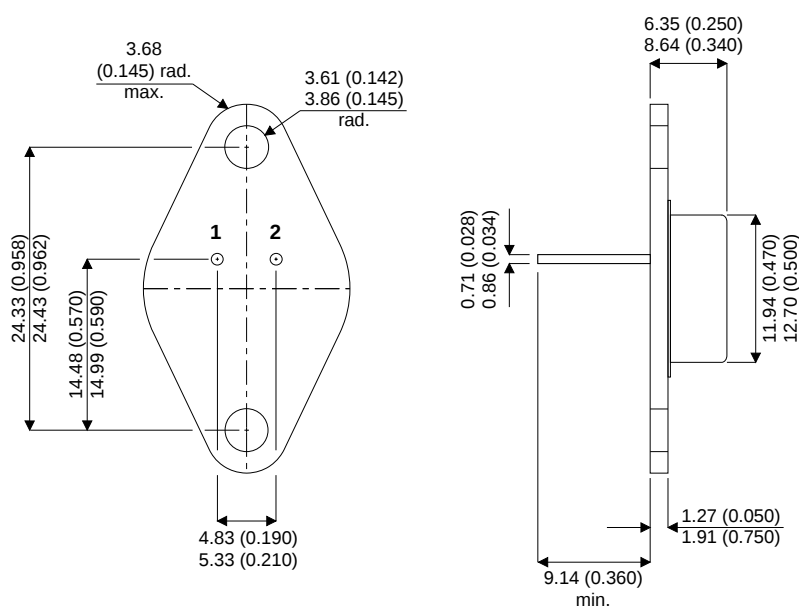


MECHANICAL DATA

Dimensions in mm (inches)



NPN EPITAXIAL POWER TRANSISTOR IN TO66 HERMETIC PACKAGE

APPLICATIONS

- SCREENING OPTIONS AVAILABLE
- TO66 PACKAGE

TO-66 Metal Package.

PIN 1 = BASE PIN 2 = EMITTER CASE = COLLECTOR

ABSOLUTE MAXIMUM RATINGS

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

		2N4910X	2N4911X	2N4912X
$V_{(BR)CBO}$	Collector – Base Breakdown Voltage	40V	60V	80V
$V_{(BR)CEO}$	Collector – Emitter Breakdown Voltage	40V	60V	80V
$V_{(BR)EBO}$	Emitter – Base Breakdown Voltage		5V	
I_C	Continuous Collector Current		4A	
I_B	Base Current		1A	
P_D	Total Power Dissipation		25W	
T_C	Operating Case Temperature Range		-65 to +200°C	
T_{stg}	Storage Temperature Range		-65 to +200°C	
$R_{\theta JC}$	Thermal Resistance , Junction To Case		7.0°C/W	

Electrical Characteristics ($T_C = 25^\circ\text{C}$ unless otherwise stated.)

Parameter	Test Conditions	Min.	Typ.	Max.	Units
I_{CEO} Collector – Emitter Cut-off Current	$V_{CE} = 30\text{V}$ $I_B = 0$			0.50	mA
I_{CEX} Collector – Emitter Cut-off Current	$V_{CE} = V_{(BR)CEO}$ $V_{BE} = 1.5\text{V}$			100	μA
	$T_C = 150^\circ\text{C}$			1.0	mA
I_{CBO} Collector – Base Cut-off Current	$V_{CB} = V_{(BR)CBO}$ $I_E = 0$			0.1	mA
I_{CES} Collector – Emitter Leakage Current	$V_{CE} = V_{(BR)CEO}$ $V_{BE} = 0$			100	μA
$V_{CE(sat)}^*$ Collector – Emitter Saturation Voltage	$I_C = 1\text{A}$ $I_B = 0.1\text{A}$			0.60	V
$V_{BE(sat)}^*$ Base – Emitter Saturation Voltage	$I_C = 1\text{A}$ $I_B = 0.1\text{A}$			1.3V	V
V_{BE}^* Base – Emitter Voltage	$I_C = 1\text{A}$ $V_{CE} = 1\text{V}$			1.3V	V
h_{FE}^* DC Current Gain	$V_{CE} = 1\text{V}$ $I_C = .5\text{mA}$	20		175	—
	$V_{CE} = 1\text{V}$ $I_C = 1\text{mA}$	10			
	$V_{CE} = 1\text{V}$ $I_C = .05\text{A}$	40			

* Pulse Test: $t_p = 300\mu\text{s}$, $\delta = 2\%$.