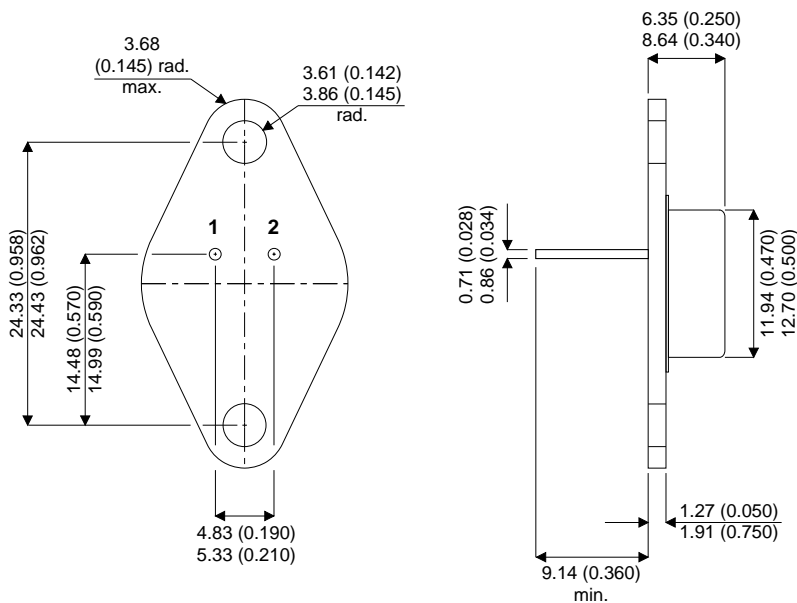


**MECHANICAL DATA**

Dimensions in mm (inches)



**NPN EPITAXIAL  
POWER TRANSISTOR  
IN TO66  
HERMETIC PACKAGE**

**APPLICATIONS**

- SCREENING OPTIONS AVAILABE
- TO66 PACKAGE

**TO-66 Metal Package.**

PIN 1 = BASE      PIN 2 = EMITTER      CASE = COLLECTOR

**ABSOLUTE MAXIMUM RATINGS**

(T<sub>case</sub> = 25°C unless otherwise stated)

		2N4910X	2N4911X	2N4912X
V <sub>(BR)CBO</sub>	Collector – Base Breakdown Voltage	40V	60V	80V
V <sub>(BR)CEO</sub>	Collector – Emitter Breakdown Voltage	40V	60V	80V
V <sub>(BR)EBO</sub>	Emitter – Base Breakdown Voltage		5V	
I <sub>C</sub>	Continuous Collector Current		4A	
I <sub>B</sub>	Base Current		1A	
P <sub>D</sub>	Total Power Dissipation		25W	
T <sub>C</sub>	Operating Case Temperature Range		-65 to +200°C	
T <sub>stg</sub>	Storage Temperature Range		-65 to +200°C	
R <sub>θJC</sub>	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	$V_{CE} = 30V$ $I_B = 0$			0.50	mA
$I_{CEX}$ Collector – Emitter Cut-off Current	$V_{CE} = V_{(BR)CEO}$ $V_{BE} = 1.5V$			100	$\mu\text{A}$
	$T_C = 150^\circ\text{C}$			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	$\mu\text{A}$
$V_{CE(sat)}^*$ Collector – Emitter Saturation Voltage	$I_C = 1A$ $I_B = 0.1A$			0.60	V
$V_{BE(sat)}^*$ Base – Emitter Saturation Voltage	$I_C = 1A$ $I_B = 0.1A$			1.3V	V
$V_{BE}^*$ Base – Emitter Voltage	$I_C = 1A$ $V_{CE} = 1V$			1.3V	V
$h_{FE}^*$ DC Current Gain	$V_{CE} = 1V$ $I_C = .5mA$	20		175	—
	$V_{CE} = 1V$ $I_C = 1mA$	10			
	$V_{CE} = 1V$ $I_C = .05A$	40			

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