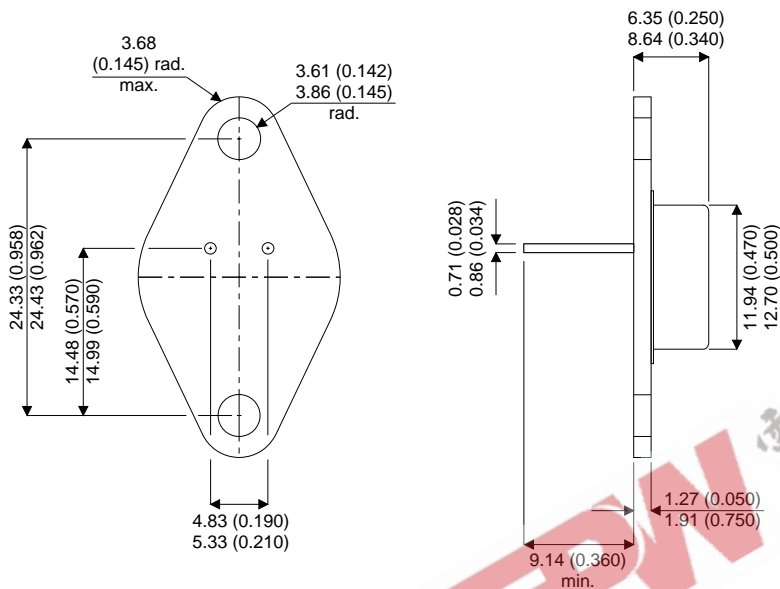


**MECHANICAL DATA**

Dimensions in mm (inches)



**TO-66 Metal Package.**

**PNP EPITAXIAL BASE  
MEDIUM POWER  
TRANSISTOR**

**APPLICATIONS**

Medium power, low frequency PNP bipolar transistor in a hermetically sealed TO-66 metal package.

**ABSOLUTE MAXIMUM RATINGS**

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

		2N4898X	2N4899X	2N4900X
$V_{(BR)CBO}$	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	$\mu\text{A}$
	$T_C = 150^\circ\text{C}$			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	$I_C = -1\text{A}$ $I_B = -0.1\text{A}$			-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	$V_{CE} = -1\text{V}$ $I_C = -50\text{mA}$	40			—
	$V_{CE} = -1\text{V}$ $I_C = -500\text{mA}$	20		130	
	$V_{CE} = -1\text{V}$ $I_C = -1\text{A}$	10			
$f_t$ Transition Frequency	$V_{CE} = -10\text{V}$ $I_C = -250\text{mA}$ $f = 1\text{ MHz}$	3.0			MHz

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