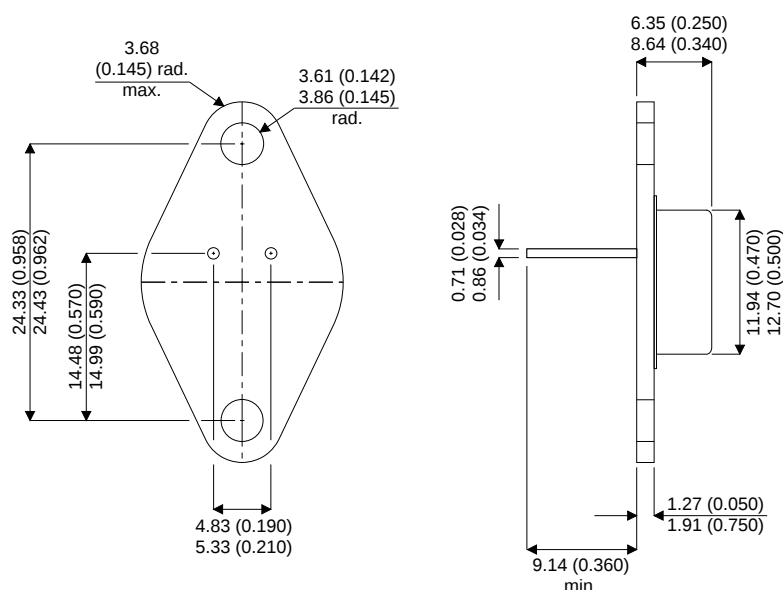


MECHANICAL DATA

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

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

		2N4898X	2N4899X	2N4900X
$V_{(\text{BR})\text{CBO}}$	Collector – Base Breakdown Voltage	–40V	–60V	–80V
$V_{(\text{BR})\text{CEO}}$	Collector – Emitter Breakdown Voltage	–40V	–60V	–80V
$V_{(\text{BR})\text{EBO}}$	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	
$R_{\theta\text{JC}}$	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	$V_{CE} = -1\text{V}$ $I_C = -50\text{mA}$	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: $t_p = 300\mu\text{s}$, $\delta = 2\%$.