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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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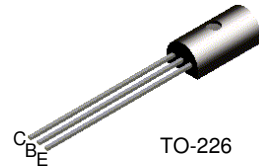


ZTX749A

ZTX749A

PNP Low Saturation Transistor

- This device are designed with high current gain and low saturation voltage with collector currents up to 2A continuous.



Absolute Maximum Ratings $T_A=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{CEO}	Collector-Emitter Voltage	-35	V
V_{CBO}	Collector-Base Voltage	-45	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current - Continuous	-2	A
T_J, T_{STG}	Operating and Storage Junction Temperature Range	-55 ~ +150	$^\circ\text{C}$

* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

NOTES:

- These ratings are based on a maximum junction temperature of 150°C .
- These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Electrical Characteristics $T_A=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
Off Characteristics					
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C = -10\text{mA}$	-35		V
BV_{CBO}	Collector-Base Breakdown Voltage	$I_C = -100\mu\text{A}$	-45		V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_E = -100\mu\text{A}$	-5		V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -30\text{V}$ $V_{CB} = -30\text{V}, T_A = 100^\circ\text{C}$		-100 -10	nA μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -4\text{V}$		-100	nA
On Characteristics*					
h_{FE}	DC Current Gain	$I_C = -50\text{mA}, V_{CE} = -2\text{V}$ $I_C = -1\text{A}, V_{CE} = -2\text{V}$ $I_C = -2\text{A}, V_{CE} = -2\text{V}$ $I_C = -6\text{A}, V_{CE} = -2\text{V}$	70 100 75 15	300	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -1\text{A}, I_B = -100\text{mA}$ $I_C = -2\text{A}, I_B = -200\text{mA}$		-300 -500	mV
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -1\text{A}, I_B = -100\text{mA}$		-1.25	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -1\text{A}, V_{CE} = -2\text{V}$		-1	V
Small-Signal Characteristics					
C_{obo}	Output Capacitance	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$		100	pF
f_T	Transition Frequency	$I_C = -100\text{mA}, V_{CE} = -5\text{V}$ $f = 100\text{MHz}$	100		

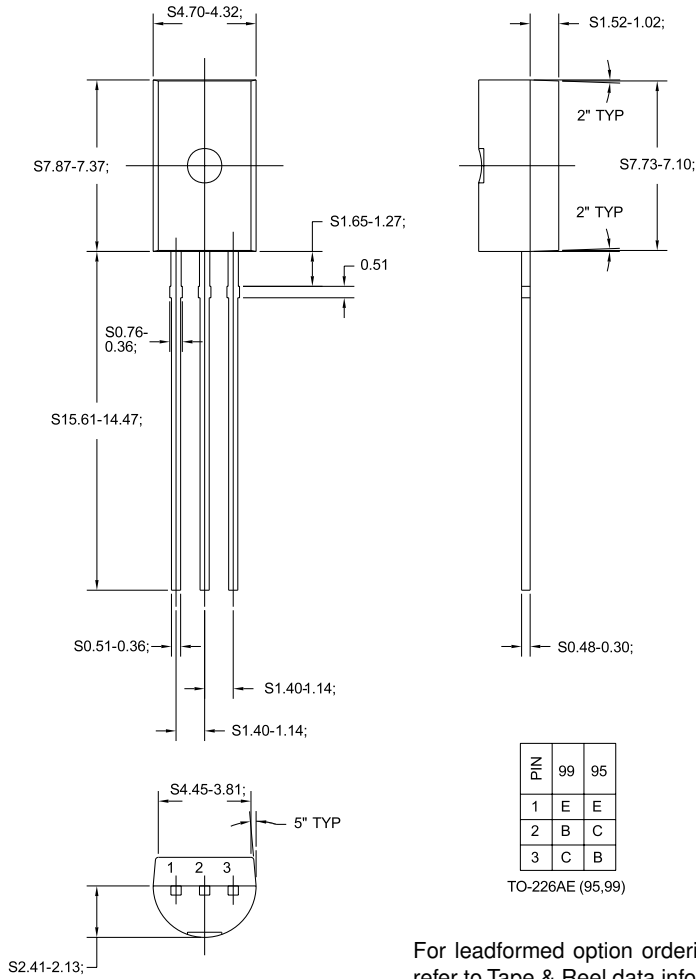
* Pulse Test: Pulse Width $\leq 300\mu\text{s}$, Duty Cycle $\leq 2\%$

Thermal Characteristics $T_A=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Max.	Units
P_D	Total Device Dissipation	1	W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	125	$^\circ\text{C}/\text{W}$

Package Dimensions

TO-226



PIN	99	95
1	E	E
2	B	C
3	C	B

TO-226AE (95,99)

For leadformed option ordering, refer to Tape & Reel data information.

Dimensions in Millimeters

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Definition of Terms

Datasheet Identification	Product Status	Definition
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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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