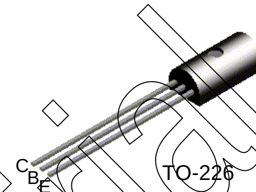
FAIRCHILD SEMICONDUCTOR®

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°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	°C

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

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

Electrical Characteristics T_A=25°C unless otherwise noted

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

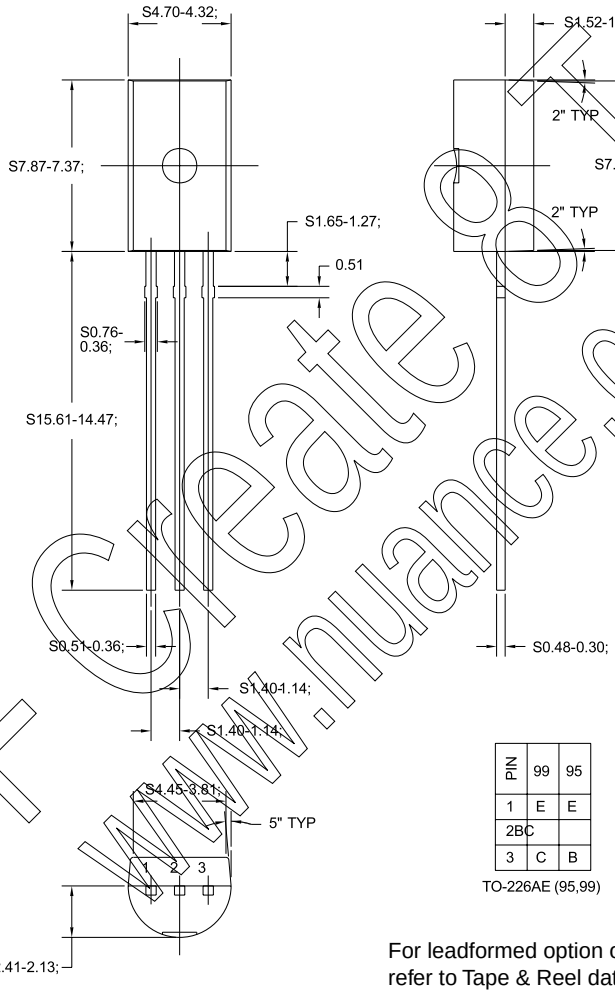
* Pulse Test: Pulse Width ≤ 300μs, Duty Cycle ≤ 2%

Thermal Characteristics T_A=25°C unless otherwise noted

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

Package Dimensions

TO-226



PIN	99	95
1	E	E
2BC		
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

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