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[ZTX749STOA](#)

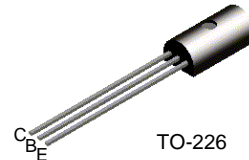For any questions, you can email us directly:
sales@integrated-circuit.com

ZTX749

FAIRCHILD

SEMICONDUCTOR®

ZTX749

PNP Low Saturation Transistor

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

C
B
E   TO-226

Absolute Maximum Ratings T_A=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CEO}	Collector-Emitter Voltage	-25	V
V_{CBO}	Collector-Base Voltage	-35	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

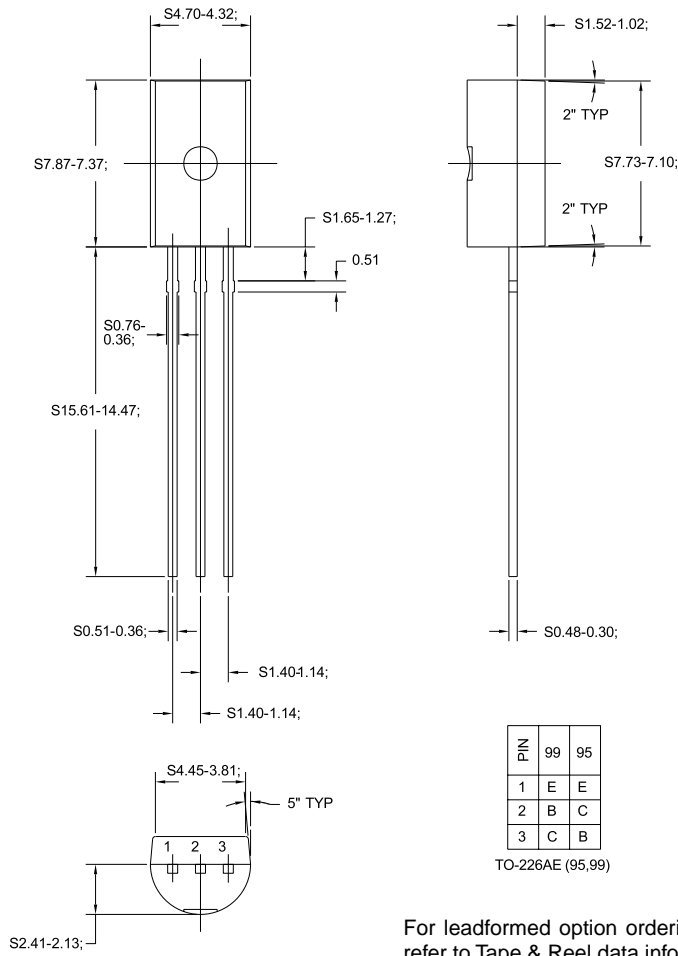| Symbol	Parameter	Test Condition	Min.	Max.	Units
Off Characteristics					
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C = -10mA	-25		V
BV_{CBO}	Collector-Base Breakdown Voltage	I_C = -100µA	-35		V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E = -100µA	-5		V
I_{CBO}	Collector Cutoff Current	V_{CB} = -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 = 1-00mA, V_{CE} = -5V f = 100MHz	100		

* Pulse Test: Pulse Width $\leq$ 300µs, Duty Cycle $\leq$ 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

ZTX749

Package Dimensions

TO-226

S4.70-4.32;
S7.87-7.37;
S1.65-1.27;
0.51
S0.76-0.36;
S15.61-14.47;
S0.51-0.36;
S1.40-1.14;
S1.40-1.14;
S4.45-3.81;
5" TYP
S2.41-2.13;

S1.52-1.02;
2" TYP
S7.73-7.10;
2" TYP
S0.48-0.30;

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

Rev. A, August 2003

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CoolFET™	FASTr™	MicroFET™	PowerTrench®	SuperSOT™-6
CROSSVOLT™	FRFET™	MicroPak™	QFET®	SuperSOT™-8
DOME™	GlobalOptoisolator™	MICROWIRE™	QS™	SyncFET™
EcoSPARK™	GTO™	MSX™	QT Optoelectronics™	TinyLogic®
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Programmable Active Droop™		OPTOPLANAR™	SMART START™	

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PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
Preliminary	First Production	This datasheet contains preliminary data, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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.
Obsolete	Not In Production	This datasheet contains specifications on a product that has been discontinued by Fairchild semiconductor. The datasheet is printed for reference information only.