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ZTX749

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 TA=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	Α
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.

- 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°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	$I_{C} = -100 \mu A$	-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 Chara	cteristics*	·			
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	$I_C = -1A, I_B = -100mA$ $I_C = -2A, I_B = -200mA$		-300 -500	mV
V _{BE} (sat)	Base-Emitter Saturation Voltage	I _C = -1A, I _B = -100mA -1.		-1.25	V
V _{BE} (on)	Base-Emitter On Voltage	I _C = -1A, V _{CE} = -2V		-1	V
Small-Sig	nal Characteristics	•		•	
C _{obo}	Output Capacitance	V _{CB} = -10V, I _E = 0, f = 1MHz		100	РF
f _T	Transition Frequency	$I_C = 1-00$ mA, $V_{CE} = -5V$ f = 100MHz	100		

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

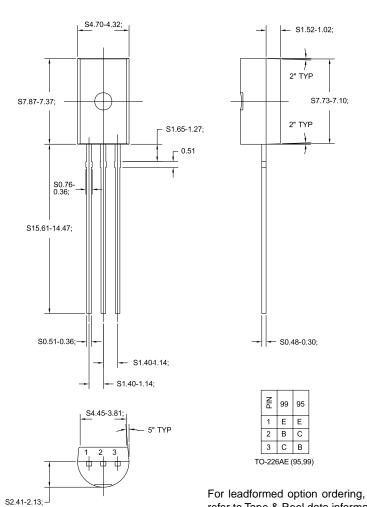
Thermal Characteristics T_A=25°C unless otherwise noted

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

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Package Dimensions

TO-226



refer to Tape & Reel data information.

Dimensions in Millimeters

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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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