



ZTX788A

ELECTRICAL CHARACTERISTICS (at T_{amb} = 25°C)

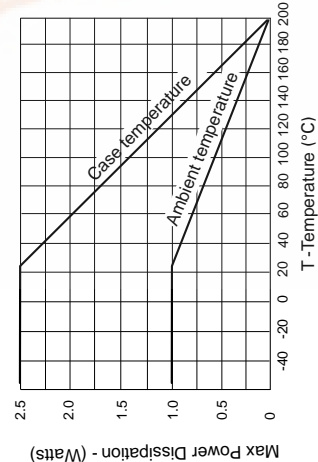
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Transition Frequency	f _t	100	150		MHz	I _C =50mA, V _{CE} =5V, f=50MHz
Output Capacitance	C _{obo}		30	60	pF	V _{CB} =10V, f=1MHz
Switching Times	t _{on}		40		ns	I _C =500mA, I _B I _F =50mA
	t _{off}		500		ns	I _B I _F =50mA, V _{CE} =10V

Measured under pulsed conditions. Pulse width=300µs. Duty cycle ≤2%

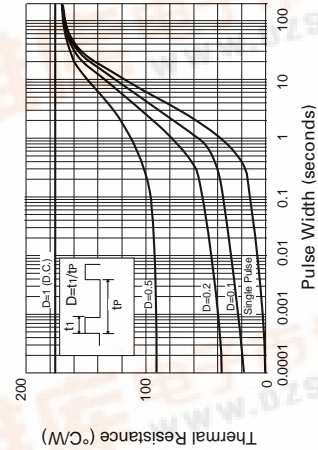
HERMAL CHARACTERISTICS

PARAMETER	SYMBOL	MAX.	UNIT
Thermal Resistance: Junction to Ambient ₁	R _{th(j-amb)1}	175	°C/W
Junction to Ambient ₂	R _{th(j-amb)2}	116	°C/W
Junction to Case	R _{th(j-case)}	70	°C/W

Device mounted on P.C.B. with copper equal to 1 sq. Inch minimum.



Derating curve



Maximum transient thermal impedance

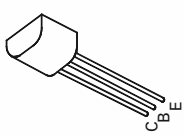
PNP SILICON PLANAR MEDIUM POWER HIGH GAIN TRANSISTOR

PROVISIONAL DATASHEET ISSUE 2 – SEPTEMBER 94

FEATURES

- * 15 Volt V_{CEO}
- * Gain of 200 at I_C=2 Amps
- * Very low saturation voltage

ZTX788A



E-Line
TO92 Compatible

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V _{CB0}	-20	V
Collector-Emitter Voltage	V _{CE0}	-15	V
Emitter-Base Voltage	V _{EB0}	-5	V
Peak Pulse Current	I _{CM}	-10	A
Continuous Collector Current	I _C	-3	A
Practical Power Dissipation*	P _{totp}	1.5	W
Power Dissipation at T _{amb} =25°C derate above 25°C	P _{tot}	1	W
		5.7	mW/°C
Operating and Storage Temperature Range	T _J ; T _{stg}	-55 to +200	°C

*The power which can be dissipated assuming the device is mounted in a typical manner on a P.C.B. with copper equal to 1 inch square minimum

ELECTRICAL CHARACTERISTICS (at T_{amb} = 25°C)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	V _{(BR)CBO}	-20	-30		V	I _C =100µA
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	-15	-20		V	I _C =10mA*
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	-5	-8.5		V	I _E =100µA
Collector Cut-Off Current	I _{CBO}			-0.1	µA	V _{CB} =-10V
				-10	µA	V _{CB} =-10V, T _{amb} =100°C
Emitter Cut-Off Current	I _{EBO}			-0.1	µA	V _{EB} =-4V
				-0.025	µA	I _C =0.1A, I _B =-2mA*
Collector-Emitter Saturation Voltage	V _{CE(sat)}			-0.25	V	I _C =2A, I _B =20mA*
				-0.28	V	I _C =3A, I _B =200mA*
				-0.85	V	I _C =2A, I _B =-20mA*
Base-Emitter Saturation Voltage	V _{BE(sat)}			-0.8	V	I _C =2A, V _{CE} =-3V*
Base-Emitter Turn-On Voltage	V _{BE(on)}				V	
Static Forward Current Transfer Ratio	h _{FE}	300				I _C =10mA, V _{CE} =1V*
		250				I _C =1A, V _{CE} =1V*
		200				I _C =2A, V _{CE} =1V*
		80				I _C =10A, V _{CE} =2V*

查询ZTX788A供应商

捷多邦, 专业PCB打样工厂, 24小时加急出货

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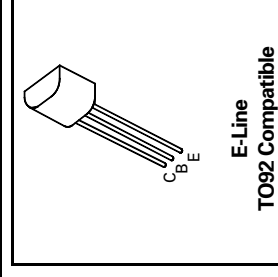
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HIGH GAIN TRANSISTOR

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FEATURES

- * 15 Volt V_{CE0}
- * Gain of 200 at $I_C=2$ Amps
- * Very low saturation voltage



ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^\circ\text{C}$)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Transition Frequency	f_T	100	150		MHz	$I_C=50\text{mA}$, $V_{CE}=5\text{V}$ $f=50\text{MHz}$
Output Capacitance	C_{obo}		30	60	pF	$V_{CB}=10\text{V}$, $f=1\text{MHz}$
Switching Times	t_{on}		40		ns	$I_C=500\text{mA}$, $I_B I_F=50\text{mA}$
	t_{off}		500		ns	$I_B I_F=50\text{mA}$, $V_{CE}=10\text{V}$

Measured under pulsed conditions. Pulse width=300µs. Duty cycle ≤2%

HERMAL CHARACTERISTICS

PARAMETER	SYMBOL	MAX.	UNIT
Thermal Resistance: Junction to Ambient ₁ Junction to Ambient ₂ Junction to Case	$R_{th(j-amb)1}$	175	$^\circ\text{C/W}$
	$R_{th(j-amb)2}^\dagger$	116	$^\circ\text{C/W}$
	$R_{th(j-case)}$	70	$^\circ\text{C/W}$

Device mounted on P.C.B. with copper equal to 1 sq. Inch minimum.

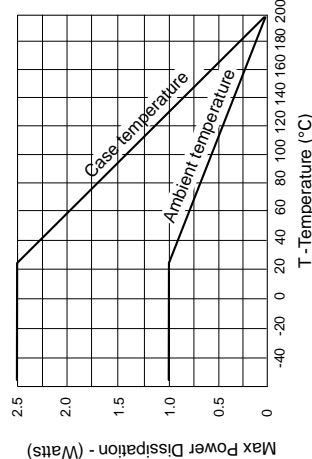
ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-20	V
Collector-Emitter Voltage	V_{CEO}	-15	V
Emitter-Base Voltage	V_{EBO}	-5	V
Peak Pulse Current	I_{CM}	-10	A
Continuous Collector Current	I_C	-3	A
Practical Power Dissipation*	P_{totp}	1.5	W
Power Dissipation at $T_{amb}=25^\circ\text{C}$ derate above 25°C	P_{tot}	1	W
	$T_j; T_{stg}$	5.7	$\text{mW}/^\circ\text{C}$
Operating and Storage Temperature Range		-55 to +200	$^\circ\text{C}$

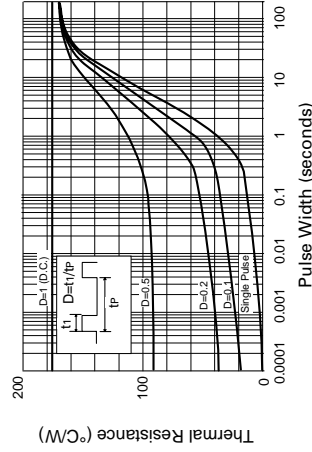
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ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^\circ\text{C}$)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-20	-30		V	$I_C=100\mu\text{A}$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-15	-20		V	$I_C=10\text{mA}^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5	-8.5		V	$I_E=100\mu\text{A}$
Collector Cut-Off Current	I_{CBO}			-0.1	μA	$V_{CB}=10\text{V}$
				-10	μA	$V_{CB}=10\text{V}$, $T_{amb}=100^\circ\text{C}$
Emitter Cut-Off Current	I_{EBO}			-0.1	μA	$V_{EB}=4\text{V}$
				-0.025	V	$I_C=0.1\text{A}$, $I_B=2\text{mA}^*$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.25	V	$I_C=2\text{A}$, $I_B=20\text{mA}^*$
				-0.28	V	$I_C=3\text{A}$, $I_B=200\text{mA}^*$
				-0.85	V	$I_C=2\text{A}$, $I_B=20\text{mA}^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			-0.8	V	$I_C=2\text{A}$, $V_{CE}=3\text{V}^*$
Base-Emitter Turn-On Voltage	$V_{BE(on)}$				V	
Static Forward Current Transfer Ratio	h_{FE}	300		800		$I_C=10\text{mA}$, $V_{CE}=1\text{V}^*$
		250				$I_C=1\text{A}$, $V_{CE}=1\text{V}^*$
		200				$I_C=2\text{A}$, $V_{CE}=1\text{V}^*$
		80				$I_C=10\text{A}$, $V_{CE}=2\text{V}^*$



Derating curve



Maximum transient thermal impedance