



ZTX955

PNP SILICON PLANAR MEDIUM POWER HIGH CURRENT TRANSISTOR

ZTX955

ISSUE 3 - JUNE 94

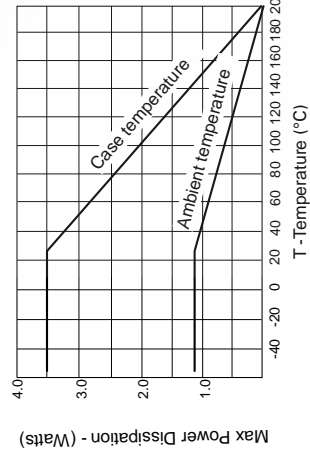
ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^{\circ}C$)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Base-Emitter Turn-On Voltage	$V_{BE(on)}$		-790	-900	mV	$I_C = -3A, V_{CE} = -5V^*$
Static Forward Current Transfer Ratio	h_{FE}	100	200	300		$I_C = -10mA, V_{CE} = -5V^*$
		100	200			$I_C = -1A, V_{CE} = -5V^*$
		75	140			$I_C = -3A, V_{CE} = -5V^*$
Transition Frequency	f_T		110		MHz	$I_C = -100mA, V_{CE} = -10V, f = 50MHz$
			40		pF	$V_{CB} = -20V, f = 1MHz$
Output Capacitance	C_{obo}		68		ns	$I_C = -1A, I_B = -100mA, V_{CC} = -50V$
Switching Times	t_{on}		1030		ns	
	t_{off}				ns	

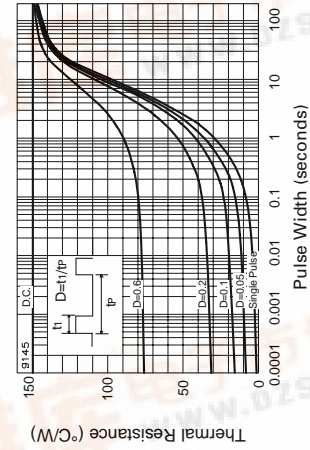
Measured under pulsed conditions. Pulse width=300 μ s. Duty cycle \leq 2%

HERMAL CHARACTERISTICS

PARAMETER	SYMBOL	MAX.	UNIT
Thermal Resistance: Junction to Ambient	$R_{th(j-amb)}$	150	$^{\circ}C/W$
Junction to Case	$R_{th(j-case)}$	50	$^{\circ}C/W$



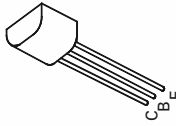
Derating curve



Maximum transient thermal impedance

FEATURES

- * 3 Amps continuous current
- * Up to 10 Amps peak current
- * Very low saturation voltage
- * Excellent gain characteristics up to 3 Amps
- * Spice model available



E-Line
TO92 Compatible

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-180	V
Collector-Emitter Voltage	V_{CEO}	-140	V
Emitter-Base Voltage	V_{EBO}	-6	V
Peak Pulse Current	I_{CM}	-10	A
Continuous Collector Current	I_C	-3	A
Practical Power Dissipation*	P_{top}	1.58	W
Power Dissipation at $T_{amb} = 25^{\circ}C$	P_{tot}	1.2	W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 to +200	$^{\circ}C$

*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 $T_{amb} = 25^{\circ}C$ unless otherwise stated)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-180	-210		V	$I_C = -100\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CE}$	-180	-210		V	$I_C = -1\mu A, R_B \leq 1K\Omega$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-140	-170		V	$I_C = -10mA^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-6	-8		V	$I_E = -100\mu A$
Collector Cut-Off Current	I_{CBO}			-50	nA	$V_{CB} = -150V, T_{amb} = 100^{\circ}C$
				-1	μA	$V_{CB} = -150V, T_{amb} = 100^{\circ}C$
Collector Cut-Off Current	I_{CER}			-50	nA	$V_{CB} = -150V, T_{amb} = 100^{\circ}C$
				-1	μA	$V_{CB} = -150V, T_{amb} = 100^{\circ}C$
Emitter Cut-Off Current	I_{EBO}			-10	nA	$V_{EB} = -6V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-60	mV	$I_C = -100mA, I_B = -5mA^*$
				-100	mV	$I_C = -500mA, I_B = -50mA^*$
				-120	mV	$I_C = -1A, I_B = -100mA^*$
				-330	mV	$I_C = -3A, I_B = -300mA^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			-1050	mV	$I_C = -3A, I_B = -300mA^*$

查询ZTX955供应商

捷多邦, 专业PCB打样工厂, 24小时加急出货

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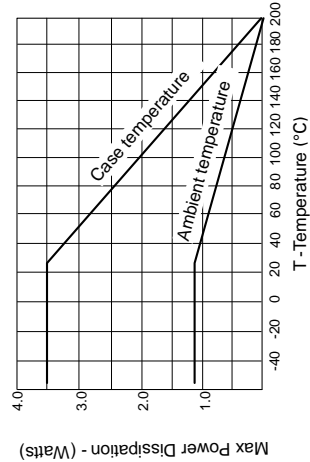
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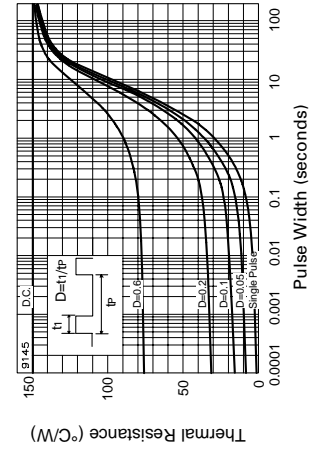
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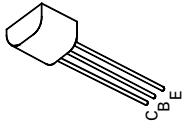
Derating curve



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Operating and Storage Temperature Range	T_J, T_{stg}	-55 to +200	$^{\circ}C$

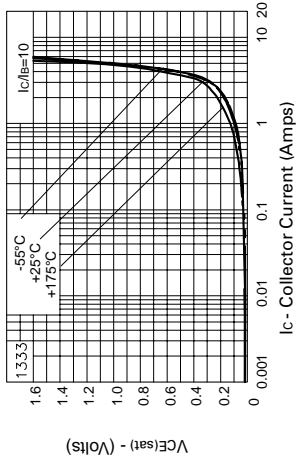
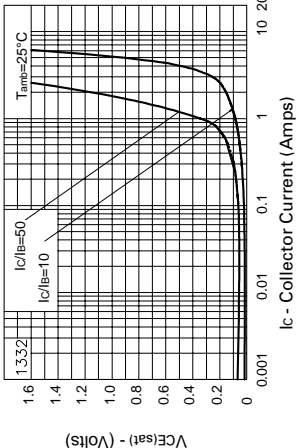
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Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-6	-8		V	$I_E = -100\mu A$
Collector Cut-Off Current	I_{CBO}			-50	nA	$V_{CB} = -150V, V_{CE} = -150V, T_{amb} = 100^{\circ}C$
Collector Cut-Off Current	I_{CER}			-50	nA	$V_{CB} = -150V, V_{CE} = -150V, T_{amb} = 100^{\circ}C$
Emitter Cut-Off Current	I_{EBO}			-10	nA	$V_{EB} = -6V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$		-30	-60	mV	$I_C = -100mA, I_B = -5mA^*$
			-60	-100	mV	$I_C = -500mA, I_B = -50mA^*$
			-90	-120	mV	$I_C = -1A, I_B = -100mA^*$
			-250	-330	mV	$I_C = -3A, I_B = -300mA^*$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-920	-1050	mV	$I_C = -3A, I_B = -300mA^*$

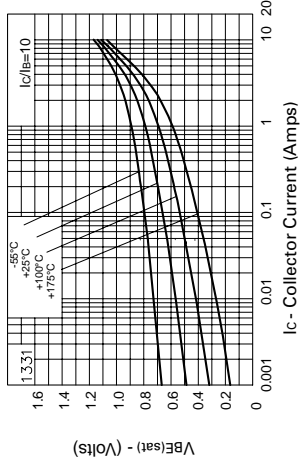
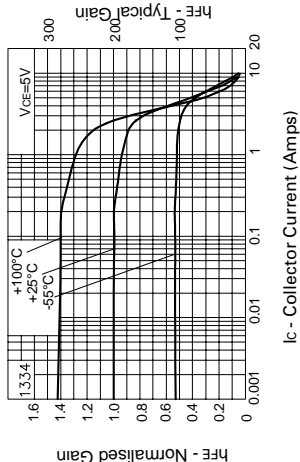
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TYPICAL CHARACTERISTICS



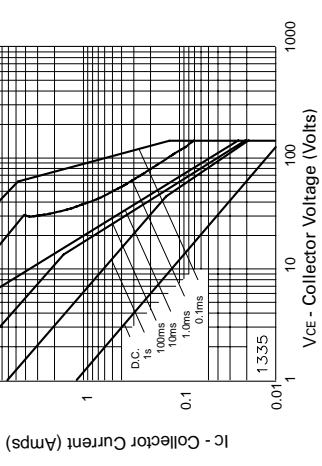
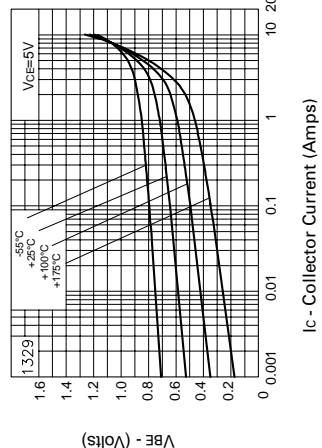
VCE(sat) v IC

VCE(sat) v IC



hFE v IC

VBE(sat) v IC



VBE(on) v IC

Safe Operating Area