

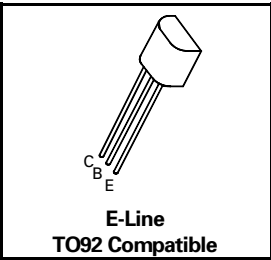
PNP SILICON PLANAR MEDIUM POWER HIGH VOLTAGE TRANSISTOR

ZTX558

ISSUE 1 – APRIL 94

FEATURES

- * 400 Volt V_{CEO}
- * 200mA continuous current
- * P_{tot} = 1 Watt



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-400	V
Collector-Emitter Voltage	V_{CEO}	-400	V
Emitter-Base Voltage	V_{EBO}	-5	V
Continuous Collector Current	I_C	-200	mA
Power Dissipation	P_{tot}	1	W
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +200	°C

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-400			V	$I_C = -100\mu A$
Collector-Emitter Breakdown Voltage	$V_{BR(CEO)}$	-400			V	$I_C = -10mA^*$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5			V	$I_E = -100\mu A$
Collector Cut-Off Current	I_{CBO}			-100	nA	$V_{CB} = -320V$
Collector Cut-Off Current	I_{CES}			-100	nA	$V_{CE} = -320V$
Emitter Cut-Off Current	I_{EBO}			-100	nA	$V_{EB} = -4V$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.2 -0.5	V V	$I_C = -20mA, I_B = -2mA$ $I_C = -50mA, I_B = -6mA$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			-0.9	V	$I_C = -50mA, I_B = -5mA$
Base-Emitter Turn On Voltage	$V_{BE(on)}$			-0.9	V	$I_C = -50mA, V_{CE} = -10V$
Static Forward Current Transfer Ratio	h_{FE}	100 100 15		300		$I_C = -1mA, V_{CE} = -10V$ $I_C = -50mA, V_{CE} = -10V$ $I_C = -100mA, V_{CE} = -10V^*$
Transition Frequency	f_T	50			MHz	$I_C = -10mA, V_{CE} = -20V$ $f = 20MHz$
Collector-Base Breakdown Voltage	C_{obo}			5	pF	$V_{CB} = -20V, f = 1MHz$
Switching times	t_{on} t_{off}		95 1600		ns ns	$I_C = -50mA, V_C = -100V$ $I_{B1} = 5mA, I_{B2} = -10mA$

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

TYPICAL CHARACTERISTICS

