

# ZTX558

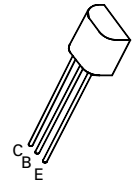
# PNP SILICON PLANAR MEDIUM POWER HIGH VOLTAGE TRANSISTOR

# ZTX558

ISSUE 1 – APRIL 94

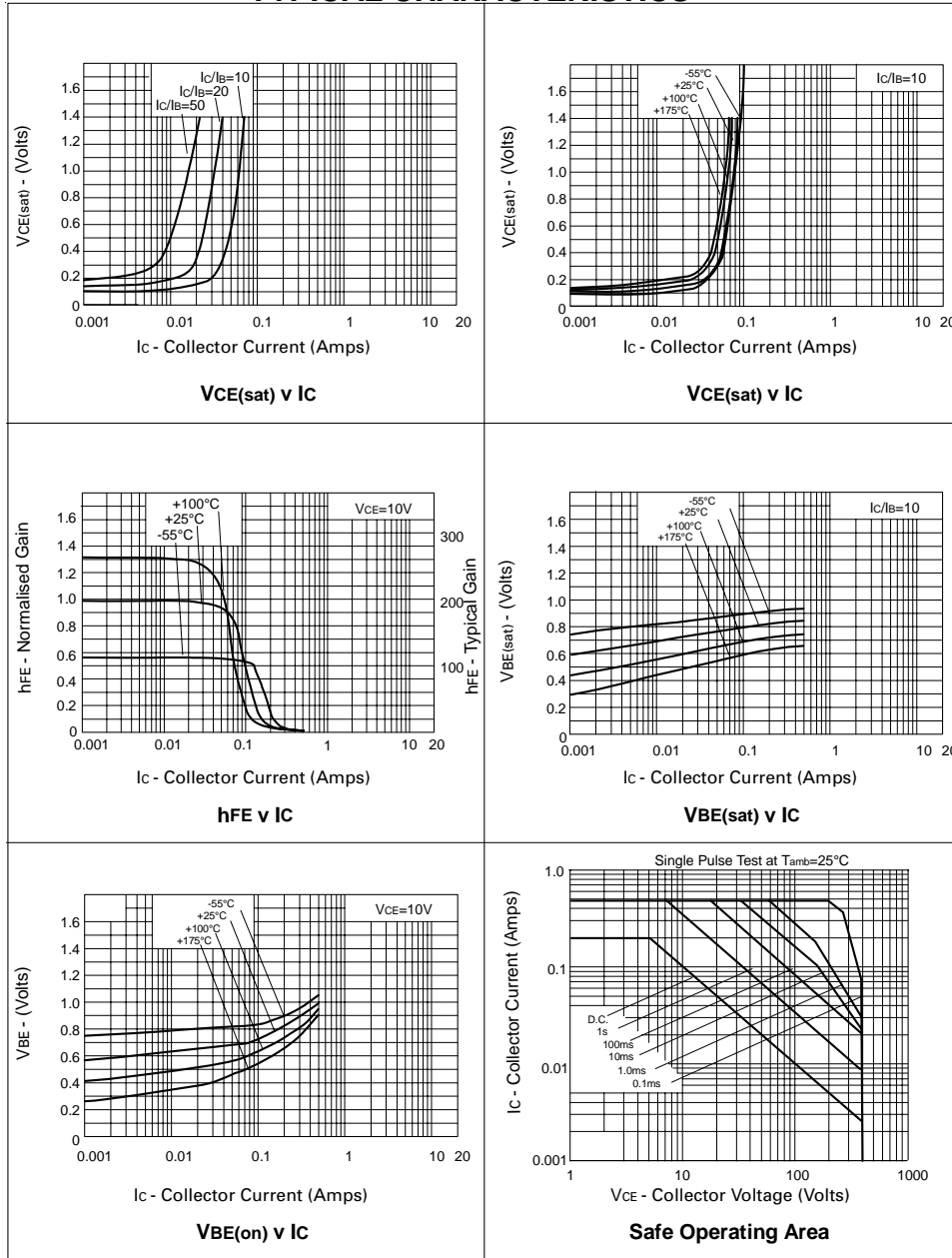
## FEATURES

- \* 400 Volt  $V_{CE0}$
- \* 200mA continuous current
- \*  $P_{tot} = 1$  Watt



**E-Line**  
**TO92 Compatible**

## TYPICAL CHARACTERISTICS



## 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 $T_{amb} = 25^\circ\text{C}$ ).

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

\* Measured under pulsed conditions. Pulse width=300 $\mu\text{s}$ . Duty cycle  $\leq 2\%$

# ZTX558

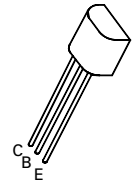
# PNP SILICON PLANAR MEDIUM POWER HIGH VOLTAGE TRANSISTOR

# ZTX558

ISSUE 1 – APRIL 94

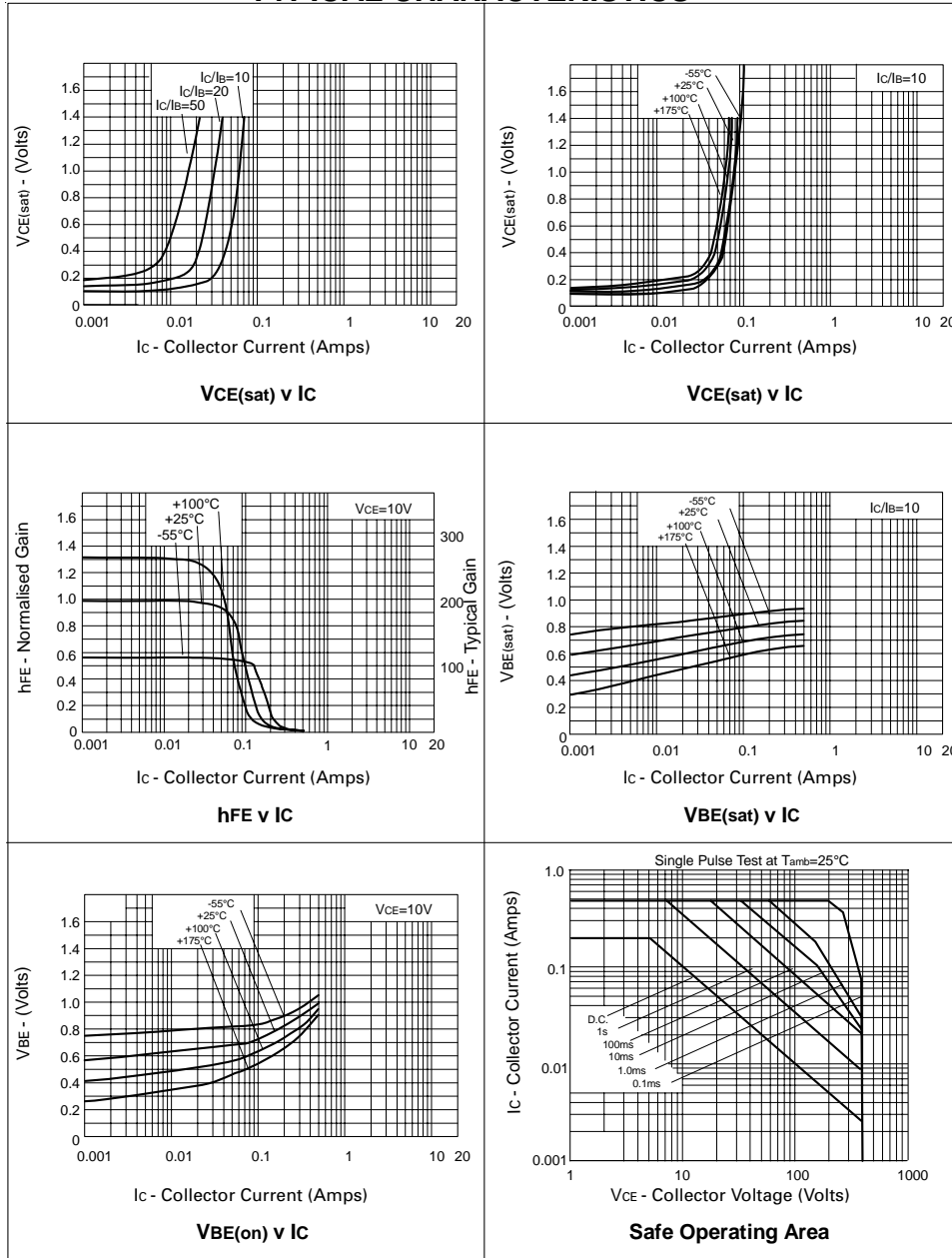
## FEATURES

- \* 400 Volt  $V_{CE0}$
- \* 200mA continuous current
- \*  $P_{tot} = 1$  Watt



**E-Line**  
**TO92 Compatible**

## TYPICAL CHARACTERISTICS



## 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 $T_{amb} = 25^\circ\text{C}$ ).

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

\* Measured under pulsed conditions. Pulse width=300 $\mu\text{s}$ . Duty cycle  $\leq 2\%$

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Bipolar Transistors - BJT category](#):*

*Click to view products by [Diodes Incorporated manufacturer](#):*

Other Similar products are found below :

[619691C](#) [MCH4017-TL-H](#) [BC546/116](#) [BC557/116](#) [BSW67A](#) [NTE187A](#) [NTE195A](#) [NTE2302](#) [NTE2330](#) [NTE63](#) [C4460](#) [2SA1419T-TD-H](#)  
[2SA1721-O\(TE85L,F\)](#) [2SA2126-E](#) [2SB1204S-TL-E](#) [2SC5488A-TL-H](#) [2SD2150T100R](#) [SP000011176](#) [2N2369ADCSM](#) [2SC2412KT146S](#)  
[2SC5490A-TL-H](#) [2SD1816S-TL-E](#) [2SD1816T-TL-E](#) [CMXT2207 TR](#) [CPH6501-TL-E](#) [MCH4021-TL-E](#) [US6T6TR](#) [732314D](#) [CMXT3906 TR](#)  
[CPH3121-TL-E](#) [CPH6021-TL-H](#) [873787E](#) [UMX21NTR](#) [EMT2T2R](#) [MCH6102-TL-E](#) [FP204-TL-E](#) [NJL0302DG](#) [2N3583](#) [2N3879](#)  
[2SA1434-TB-E](#) [2SC3143-4-TB-E](#) [2SD1621S-TD-E](#) [30A02MH-TL-E](#) [NSV40301MZ4T1G](#) [NTE13](#) [NTE15](#) [NTE16001](#) [NTE16006](#) [NTE26](#)  
[NTE320](#)