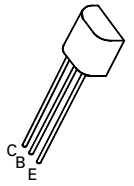
PNP SILICON PLANAR SMALL SIGNAL TRANSISTOR

ISSUE 2 – MARCH 94

ZTX541



E-Line
TO92 Compatible

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-100	V
Collector-Emitter Voltage	V_{CEO}	-100	V
Emitter-Base Voltage	V_{EBO}	-5	V
Continuous Collector Current	I_C	-100	mA
Power Dissipation at T_{amb}=25°C	P_{tot}	300	mW
Operating and Storage Temperature Range	T_j:T_{stg}	-55 to +175	°C

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-100			V	I_C=-100μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-100			V	I_C=-10μA
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5			V	I_E=-100μA
Collector Cut-Off Current	I_{CBO}			-0.5	μA	V_{CB}=-80V
Emitter Cut-Off Current	I_{CER}			-0.5 -10	μA μA	V_{CE}=-80V, R_{BE}=50KΩ V_{CE}=-80V, R_{BE}=50KΩ
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.5	V	I_C=-2mA, I_B=-0.1mA
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			-1.0	V	I_C=-2mA, I_B=-0.1mA
Static Forward Current Transfer Ratio	h_{FE}	30				I_C=-2mA, V_{CE}=-1V
Transition Frequency	f_T	80			MHz	I_C=-5mA, V_{CE}=-5V f=60MHz
Output Capacitance	C_{obo}			10	pF	V_{CB}=-6V, f=1MHz

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

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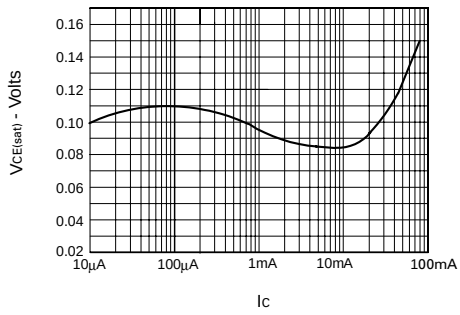
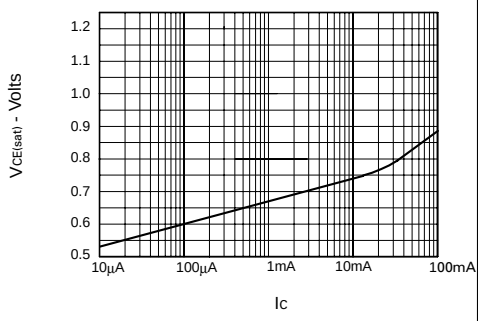
TYPICAL CHARACTERISTICS



$V_{CE(sat)}$ V Ic



$V_{BE(sat)}$ V Ic