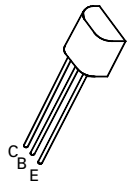
NPN SILICON PLANAR SMALL SIGNAL TRANSISTOR

ZTX341

ISSUE 2 – MARCH 94

FEATURES

* High voltage
* Low current



E-Line
TO92 Compatible

ABSOLUTE MAXIMUM RATINGS.

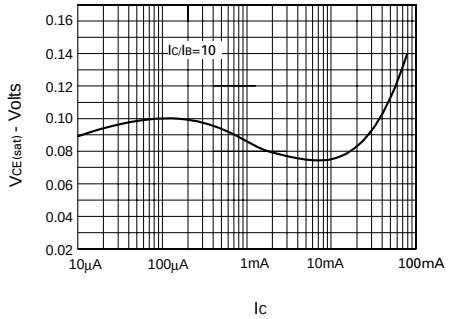
PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	100	V
Collector-Emitter Voltage	V_{CEO}	100	V
Emitter-Base Voltage	V_{EBO}	5	V
Continuous Collector Current	I_C	100	mA
Base Current	I_B	20	mA
Power Dissipation at T_{amb}=25°C	P_{tot}	300	mW
Operating and Storage Temperature Range	T_j:T_{stg}	-55 to +175	°C

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

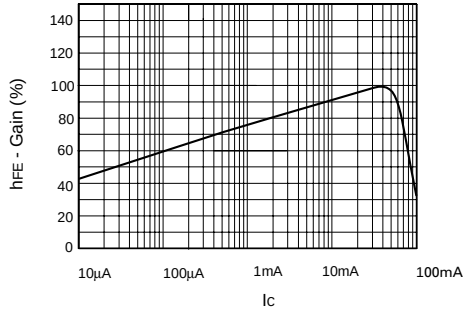
PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	100		V	I_C=10μA, I_E=0
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	100		V	I_C=10mA, I_B=0
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5		V	I_E=10μA, I_C=0
Collector Cut-Off Current	I_{CBO}		0.5	μA	V_{CB}=80V, I_E=0
Collecor-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%
†T_{amb}=100°C

TYPICAL CHARACTERISTICS



$V_{CE(sat)}$ v I_C



h_{FE} v I_C