

PNP SILICON PLANAR LOW NOISE TRANSISTOR

ZTX214C

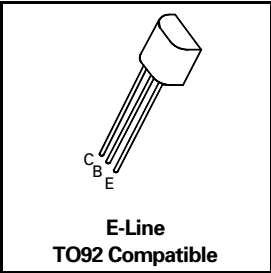
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FEATURES

- * Low noise
- * High gain

APPLICATIONS

- * Audio circuits
- * Instrumentation



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	-45	V
Collector-Emitter Voltage	V_{CEO}	-30	V
Emitter-Base Voltage	V_{EBO}	-5	V
Continuous Collector Current	I_C	-200	mA
Power Dissipation at $T_{amb}=25^{\circ}C$	P_{tot}	500	mW
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +175	$^{\circ}C$

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	-45			V	$I_C=-10\mu A, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	-30			V	$I_C=-2mA, I_B=0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	-5			V	$I_E=-10\mu A, I_C=0$
Collector Cut-Off Current	I_{CBO}			-15	nA	$V_{CB}=-30V$
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$			-0.25 -0.6	V V	$I_C=-10mA, I_B=-0.5mA^*$ $I_C=-100mA, I_B=-5mA^*$
Static Forward Current Transfer Ratio	h_{FE}	100 120 350		550		$I_C=-10\mu A, V_{CE}=-5V$ $I_C=-100mA, V_{CE}=-5V^*$ $I_C=-2mA, V_{CE}=-5V$
Transition Frequency	f_T	200			MHz	$I_C=-10mA, V_{CE}=-5V$ $f=100MHz$
Output Capacitance	C_{obo}			10	pF	$V_{CB}=-10V, I_E=0$ $f=1MHz$
Noise Figure	N			10	dB	$V_{CE}=-5V, I_C=200\mu A$ $f=1KHz, \Delta f=200Hz, R_g=2K\Omega$
Wide Band Noise Figure				2	dB	$V_{CE}=-5V, I_C=200\mu A$ $f=30Hz$ to $15KHz$ at -3dB points, $R_g=2K\Omega$

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