



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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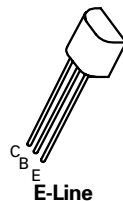
NPN SILICON PLANAR RF TRANSISTOR

ZTX325

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FEATURES

- * High f_T , 1.3GHz
- * Low noise < 5dB at 500MHz
- * Power output at 500MHz >175mW



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	30	V
Collector-Emitter Voltage	V_{CEO}	15	V
Emitter-Base Voltage	V_{EBO}	2.5	V
Mean Collector Current (Averaged over 100 μ s)	I_{AV}	25	mA
Collector Current	I_{CM}	50	mA
Power Dissipation at $T_{amb}=25^{\circ}C$	P_{tot}	350	mW
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +200	$^{\circ}C$

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

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Emitter Sustaining Voltage	$V_{CEO(SUS)}$	15			V	$I_C=10mA, I_B=0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5			V	$I_E=10\mu A, I_C=0$
Collector Cut-Off Current	I_{CBO}			10	nA	$V_{CB}=15V, I_E=0$
Emitter Cut-Off Current	I_{CES}			10	μA	$V_{CE}=15V, V_{BE}=0$
Static Forward Current Transfer Ratio	h_{FE}	25 20		150 125		$I_C=2mA, V_{CE}=1V^*$ $I_C=25mA, V_{CE}=1V^*$
Transition Frequency	f_T	1.0 1.3			GHz GHz	$I_C=2mA, V_{CE}=5V, f=400MHz$ $I_C=25mA, V_{CE}=5V, f=400MHz$
Capacitance, Collector Depletion Layer	C_{TC}			1.5	pF	$V_{CB}=10V, I_E=I_E=0, f=1MHz$
Capacitance, Emitter Depletion Layer	C_{TE}			2.0	pF	$V_{EB}=0.5V, I_C=I_C=0, f=1MHz$
Feedback Capacitance	$-C_{re}$		0.85		pF	$V_{CE}=5V, I_C=2mA, f=1MHz$
Feedback Time Constant	$r_{bb}'C_{bc}'$	2.0		12	ps	$V_{CB}=5V, -I_E=2mA, f=10.7MHz$

ZTX325

ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Noise Figure	N			5.0	dB	$f=500\text{MHz}$, $V_{CE}=5\text{V}$, $I_C=2\text{mA}$, $R_S=50\Omega$
Intermodulation Distortion	d_{im}		-53		dB	$I_C=14\text{mA}$, $V_{CE}=6\text{V}$, $f=217\text{MHz}$ $V_0=100\text{mV}$, $R_L=37.5\Omega$, $f_1=183\text{MHz}$, $f_2=200\text{MHz}$
Output Power (at $T_{case}=25^\circ\text{C}$)*	P_O	175			mW	$V_{CE}=13.5\text{V}$, $I_C=22.5\text{mA}$ $P_{in}=25\text{mW}$, $f=500\text{MHz}$

*It is essential that care be taken to reduce steady state current when no h.f. signal is applied.

TYPICAL CHARACTERISTICS

