NPN SILICON PLANAR R.F. MEDIUM POWER TRANSISTOR

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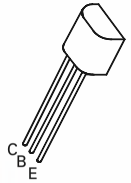
ZTX327



E-Line
TO92 Compatible

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	55	V
Collector-Emitter Voltage	V_{CEO} V_{CER}	30 55	V V
Emitter-Base Voltage	V_{EBO}	3.5	V
Continuous Collector Current	I_C	400	mA
Power Dissipation	P_{tot}	1.5	W
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.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	55			V	I_C=100μA, I_E=0
Collector-Emitter Sustaining Voltage	$V_{(BR)CEO(sus)}$ $V_{(BR)CER(sus)}$	30 55			V	IC=5mA, I_B=0 I_C=5mA, R_{BE}=10Ω
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	3.5			V	I_E=100μA,I_C=0
Collector-Emitter Cut-Off Current	I_{CEO}			20	μA	V_{CB}=45V
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$			1.0	V	I_C=100mA, I_B.=20mA
Static Forward Current Transfer	h_{FE}	15				I_C=50mA, V_{CE}=5V
Transitional Frequency	f_T	500	800		MHz	I_C=25mA, V_{CE}=15V f=100MHz
Output Capacitance	C_{obo}			3.0	pF	V_{CE}=15V, I_C=25mA f=100MHz
R.F. power output	P_{OUT}	350	440		mW	V_{CC}=12V, P_{IN}=80mW f=400MHz
Efficiency	η	50	70		%	