



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-323 Plastic-Encapsulate Transistors

KTA2014 TRANSISTOR (PNP)

FEATURES

- Low frequency power amplifier application
- Power switching application

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current –Continuous	150	mA
P_C^*	Collector Power Dissipation	100	mW
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55-150	$^{\circ}\text{C}$

SOT-323

1. BASE
2. EMITTER
3. COLLECTOR



ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-0.1\text{mA}$, $I_E=0$	-50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}$, $I_B=0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-0.1\text{mA}$, $I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-50\text{V}$, $I_E=0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5\text{V}$, $I_C=0$			-0.1	μA
DC current gain	h_{FE}	$V_{CE}=-6\text{V}$, $I_C=-2\text{mA}$	70		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-100\text{mA}$, $I_B=-10\text{mA}$			-0.3	V
Transition frequency	f_T	$V_{CE}=-10\text{V}$, $I_C=-1\text{mA}$,	80			MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10\text{V}$, $I_E=0$ $f=1\text{MHz}$			7	pF
Noise Figure	NF	$V_{CE}=-6\text{V}$, $I_C=-0.1\text{mA}$ $f=1\text{KHz}$, $R_g=10\text{K}\Omega$			10	dB

CLASSIFICATION OF h_{FE}

Rank	O(2)	Y(4)	GR(6)
Range	70-140	120-240	200-400
MARKING	SO	SY	SG

Typical Characteristics

KTA2014



