JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-92S Plastic-Encapsulate Transistors

KSA1150 TRANSISTOR (PNP)

TO – 92S

1. EMITTER
2. COLLECTOR
3. BASE

FEATURES

- General Purpose Switching Application

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-20	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-0.5	A
P_C	Collector Power Dissipation	300	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	416	℃/W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~+150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-0.1mA,I_E=0	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-10mA,I_B=0	-20			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-0.1mA,I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-25V,I_E=0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-3V,I_C=0			-0.1	μA
DC current gain	h_{FE}*	V_{CE}=-1V, I_C=-100mA	40		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$*	I_C=-500mA,I_B=-50mA			-0.4	V
Base-emitter saturation voltage	$V_{BE\ (sat)}$*	I_C=-500mA,I_B=-50mA			-1.3	V
Transition frequency	f_T	V_{CE}=-6V,I_C=-20mA, f=30MHz	150			MHz

*Pulse test: pulse width ≤350μs, duty cycle≤ 2.0%.

CLASSIFICATION OF h_{FE}

RANK	R	O	Y	G
RANGE	40-80	70-140	120-240	200-400