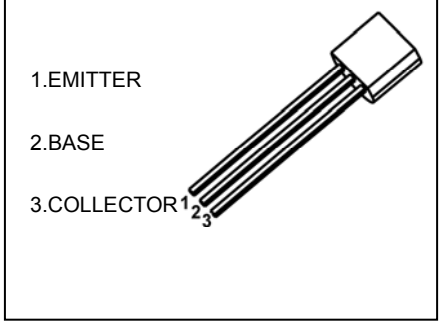
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-92 Plastic-Encapsulate Transistors

KSD471A TRANSISTOR (NPN)

TO – 92



FEATURES

- Complement To KSB564A
- Low $V_{CE(sat)}$

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	1	A
P_C	Collector Power Dissipation	800	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	156	℃/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	$V_{(BR)CEO}$	I_C=10mA,I_B=0	30			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}=30V,I_E=0			0.1	μA
DC current gain	h_{FE}	V_{CE}=1V, I_C=100mA	70		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=1A,I_B=0.1A			0.5	V
Base-emitter saturation voltage	$V_{BE\ (sat)}$	I_C=1A,I_B=0.1A			1.2	V
Collector output capacitance	C_{ob}	V_{CB}=6V,I_E=0, f=1MHz		16		pF
Transition frequency	f_T	V_{CE}=6V,I_C=10Ma		130		MHz

CLASSIFICATION OF h_{FE}

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