TO-92S Plastic-Encapsulate Transistors

KSA1175 TRANSISTOR (PNP)

TO-92S

1. EMITTER
2. COLLECTOR
3. BASE

FEATURES

- Collector-Base Voltage
- Complement to KSC2785

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current (DC)	-0.15	A
P_C	Collector Power Dissipation	0.25	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	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-10mA, I_B=0	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-10μA, I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-60V, I_E=0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V, I_C=0			-0.1	μA
DC current gain	h_{FE}	V_{CE}=-6V, I_C=-1mA	40		700	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-100mA, I_B=-10mA			-0.3	V
Base-emitter voltage	V_{BE}	V_{CE}=-6V, I_C=-1mA	-0.5		-0.8	V
Transition frequency	f_T	V_{CE}=-6V, I_C=-10mA	50			MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V, I_E=0,f=1MHz		2.8		pF
Noise figure	NF	V_{CE}=-6V, I_C=-0.3mA, f=100HZ, Rg=10KΩ			20	dB

CLASSIFICATION OF h_{FE}

Rank	R	O	Y	G	L
Range	40-80	70-140	120-240	200-400	350-700