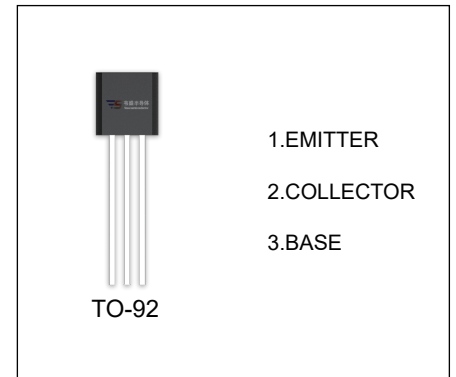


KSC1730 TRANSISTOR (NPN)

FEATURES

- High Transition Frequency
- Low $V_{CE(sat)}$



ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
KSC1730	TO-92	Bulk	1000pcs/Bag
KSC1730-TA	TO-92	Tape	2000pcs/Box

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

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	30	V
V_{CEO}	Collector-Emitter Voltage	15	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	50	mA
P_C	Collector Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	625	$^{\circ}\text{C/W}$
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

T_a=25 °C unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = 0.01mA, I _E =0	30			V
Collector-emitter breakdown	V _{(BR)CEO}	I _C =5mA, I _B =0	15			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =0.01mA, I _C =0	5			V
Collector cut-off current	I _{CBO}	V _{CB} =12V, I _E =0			0.1	μA
DC current gain	h _{FE}	V _{CE} =10V, I _C =5mA	40		240	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =10mA, I _B =1mA			0.5	V
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz			1.5	pF
Transition frequency	f _T	V _{CE} =10V, I _C = 5mA	800			MHz

CLASSIFICATION OF h_{FE}

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