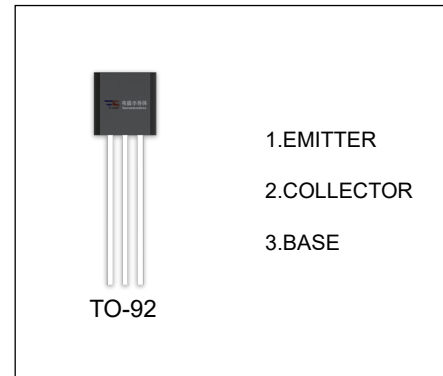


2SC2130 TRANSISTOR (NPN)

FEATURES

- High DC Current Gain



ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
2SC2130	TO-92	Bulk	1000pcs/Bag
2SC2130-TA	TO-92	Tape	2000pcs/Box

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	45	V
V _{CEO}	Collector-Emitter Voltage	40	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current -Continuous	0.8	A
P _D	Collector Power Dissipation	600	mW
R _{θJA}	Thermal Resistance from Junction to Ambient	208	°C /W
T _J , T _{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

$T_a=25\text{ }^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=0.1\text{mA}, I_E=0$	45			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10\text{mA}, I_B=0$	40			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}	$V_{CB}=35\text{V}, I_E=0$			0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE}=25\text{V}, I_B=0$			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}	$V_{CE}=1\text{V}, I_C=100\text{mA}$	100		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500\text{mA}, I_B=20\text{mA}$			0.5	V
Base-emitter voltage	V_{BE}	$V_{CE}=1\text{V}, I_C=10\text{mA}$			0.8	V
Collector output capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$			13	pF
Transition frequency	f_T	$V_{CE}=5\text{V}, I_C=10\text{mA}$	100			MHz

CLASSIFICATION OF h_{FE}

RANK	O	Y
RANGE	100-200	160-320

