



TO-92 Plastic-Encapsulate Transistors

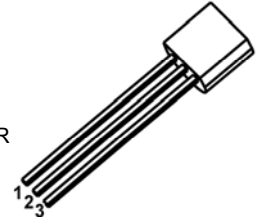
2SC2130 TRANSISTOR (NPN)

FEATURES

- High DC Current Gain

TO - 92

1. EMITTER
2. COLLECTOR
3. BASE



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	0.8	A
P _C	Collector Power Dissipation	600	mW
R _{θJA}	Thermal Resistance From Junction To Ambient	208	°C/W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = 0.1mA, I _E =0	45			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =10mA, I _B =0	40			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =0.1mA, I _C =0	5			V
Collector cut-off current	I _{CB0}	V _{CB} =35V, I _E =0			0.1	μA
Collector cut-off current	I _{CEO}	V _{CE} =25V, I _B =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} =1V, I _C =100mA	100		320	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =500mA, I _B =20mA			0.5	V
Base-emitter voltage	V _{BE}	V _{CE} =1V, I _C =10mA			0.8	V
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz			13	pF
Transition frequency	f _T	V _{CE} =5V, I _C =10mA	100			MHz

CLASSIFICATION OF h_{FE}

RANK	O	Y
RANGE	100-200	160-320

Typical Characteristics

2SC2130

