

TO-92 Plastic-Encapsulate Transistors

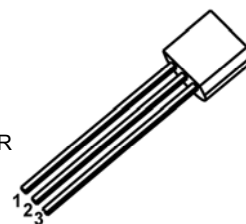
2SC3415 TRANSISTOR (NPN)

FEATURES

- High Breakdown Voltage
- Low Collector Output Capacitance
- Ideal for Chroma Circuit

TO - 92

1. EMITTER
2. COLLECTOR
3. BASE



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

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	300	V
V _{CEO}	Collector-Emitter Voltage	300	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current	0.1	A
P _C	Collector Power Dissipation	500	mW
R _{θJA}	Thermal Resistance From Junction To Ambient	250	°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 = 50μA, I _E =0	300			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =100μA, I _B =0	300			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =50μA, I _C =0	5			V
Collector cut-off current	I _{CBO}	V _{CB} =200V, I _E =0			0.5	μA
Emitter cut-off current	I _{EBO}	V _{EB} =4V, I _C =0			0.5	μA
DC current gain	h _{FE}	V _{CE} =10V, I _C =10mA	39		180	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =50mA, I _B =5mA			2	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =50mA, I _B =5mA			1.2	V
Collector output capacitance	C _{ob}	V _{CB} =30V, I _E =0, f=1MHz		3		pF
Transition frequency	f _T	V _{CE} =30V, I _C =10mA		50		MHz

CLASSIFICATION OF h_{FE}

RANK	M	N	P
RANGE	39-82	56-120	82-180