

TO-92 Plastic-Encapsulate Transistors

2SC536 TRANSISTOR (NPN)

FEATURES

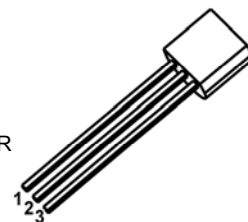
- General Purpose Amplifier Transistor

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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	0.1	A
P_C	Collector Power Dissipation	0.4	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	312	$^{\circ}\text{C}/\text{W}$
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^{\circ}\text{C}$

TO - 92

1. EMITTER
2. COLLECTOR
3. BASE



ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 0.1\text{mA}, I_E = 0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1\text{mA}, I_B = 0$	30			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}	$V_{CB} = 35\text{V}, I_E = 0$			1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 4\text{V}, I_C = 0$			1	μA
DC current gain	h_{FE}	$V_{CE} = 6\text{V}, I_C = 1\text{mA}$	60		960	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 50\text{mA}, I_B = 5\text{mA}$			0.5	V
Collector output capacitance	C_{ob}	$V_{CB} = 6\text{V}, f = 1\text{MHz}$		3.5		pF
Transition frequency	f_T	$V_{CE} = 6\text{V}, I_C = 1\text{mA}$		100		MHz

CLASSIFICATION OF h_{FE}

RANK	D	E	F	G	H
RANGE	60-120	100-200	160-320	280-560	480-960