



TO-92S Plastic-Encapsulate Transistors

2SA1515S TRANSISTOR (PNP)

FEATURES

- General Purpose Switching Application

TO – 92S

1. EMITTER
2. COLLECTOR
3. BASE



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	-32	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-1	A
P_C	Collector Power Dissipation	0.3	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	417	$^\circ\text{C/W}$
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^\circ\text{C}$

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -0.05\text{mA}, I_E = 0$	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, I_B = 0$	-32			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -0.05\text{mA}, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -20\text{V}, I_E = 0$			-0.5	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4\text{V}, I_C = 0$			-0.5	μA
DC current gain	h_{FE}	$V_{CE} = -3\text{V}, I_C = -0.1\text{A}$	82		390	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$			-0.5	V
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$			30	pF
Transition frequency	f_T	$V_{CE} = -5\text{V}, I_C = -50\text{mA}, f = 30\text{MHz}$	50			MHz

CLASSIFICATION OF h_{FE}

RANK	P	Q	R
RANGE	82-180	120-270	180-390