



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

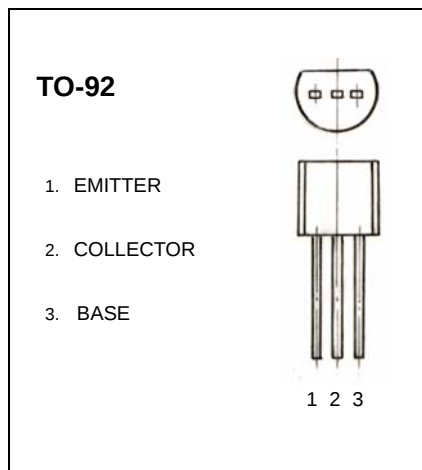
TO-92 Plastic-Encapsulate Transistors

2SC1318A TRANSISTOR (NPN)

FEATURES

- Collector output capacitance :

Cob=11 pF (TYP),20 pF (MAX)



MAXIMUM RATINGS* $T_A=25^{\circ}\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	70	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	500	mA
P_C	Collector Dissipation	750	mW
T_J, T_{stg}	Junction and Storage Temperature	-55-150	$^{\circ}\text{C}$

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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu\text{A}, I_E=0$	80			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=2\text{mA}, I_B=0$	70			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu\text{A}, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=20\text{V}, I_E=0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=10\text{V}, I_C=150\text{mA}$	85		340	
	$h_{FE(2)}$	$V_{CE}=10\text{V}, I_C=500\text{mA}$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=300\text{mA}, I_B=30\text{mA}$			0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=300\text{mA}, I_B=30\text{mA}$			1.5	V
Transition frequency	f_T	$V_{CE}=10\text{V}, I_C=50\text{mA}, f=200\text{MHz}$		120		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$		11	20	pF

CLASSIFICATION OF $h_{FE(1)}$

Rank	Q	R	S
Range	85-170	120-240	170-340

Typical Characteristics

2SC1318A

