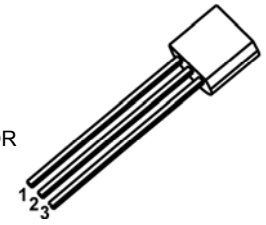
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-92 Plastic-Encapsulate Transistors

TO – 92

1. EMITTER
2. COLLECTOR
3. BASE



2SA1318 TRANSISTOR (PNP)

FEATURES

- Large Current Capacity and Wide ASO

APPLICATIONS

- Capable of Being Used in The Low Frequency to High Frequency Range

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current	-0.2	A
P_C	Collector Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	250	℃/W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~+150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-0.01mA,I_E=0	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-1mA,I_B=0	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-0.01mA,I_C=0	-6			V
Collector cut-off current	I_{CBO}	V_{CB}=-40V,I_E=0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V,I_C=0			-0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=-6V, I_C=-1mA	100		560	
	$h_{FE(2)}$	V_{CE}=-6V, I_C=-0.1mA	70			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-100mA,I_B=-10mA			-0.3	V
Base-emitter saturation voltage	$V_{BE\ (sat)}$	I_C=-100mA,I_B=-10mA			-1.0	V
Collector output capacitance	C_{ob}	V_{CB}=-6V, f=1MHz		4.5		pF
Transition frequency	f_T	V_{CE}=-6V,I_C=-10mA		200		MHz

CLASSIFICATION OF $h_{FE(1)}$

RANK	R	S	T	U
RANGE	100-200	140-280	200-400	280-560