SHENZHEN HAOCHANG SEMICONDUCTOR CO.,LTD.

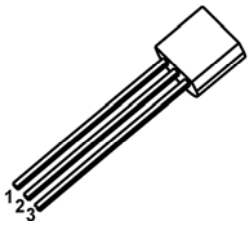
TO-92 Plastic-Encapsulate Transistors

TO – 92

1.EMITTER

2.COLLECTOR

3.BASE



BC368 TRANSISTOR (NPN)

FEATURES

- High Current
- Low Voltage

APPLICATIONS

- General Purpose Switching and Amplification

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	25	V
V_{CEO}	Collector-Emitter Voltage	20	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	1	A
P_C	Collector Power Dissipation	0.625	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	200	℃/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= 0.1mA,I_E=0	25			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=10mA,I_B=0	20			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=0.01mA,I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=25V,I_E=0			10	μA
Emitter cut-off current	I_{EBO}	V_{EB}=5V,I_C=0			10	μA
DC current gain	$h_{FE(1)}$	V_{CE}=1V, I_C=0.5A	85		375	
	$h_{FE(2)}$	V_{CE}=10V, I_C=5mA	50			
	$h_{FE(3)}$	V_{CE}=1V, I_C=1A	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=1A,I_B=0.1A			0.5	V
Base-emitter voltage	V_{BE}	I_C=1A, V_{CE}=1V			1	V
Transition frequency	f_T	V_{CE}=5V,I_C=10mA,f=35MHz	65			MHz