TO-92 Plastic-Encapsulate Transistors

BC548 TRANSISTOR（ NPN ）

FEATURES

Power dissipation

P_{CM}: 0.625 W（Tamb=25℃）

Collector current

I_{CM}: 0.1 A

Collector-base voltage

$V_{(BR)CBO}$: 30 V

Operating and storage junction temperature range

T_J，T_{stg}: -55℃ to +150℃

TO—92

1.COLLECTOR

2. BASE

3.EMITTER

1 2 3

ELECTRICAL CHARACTERISTICS（Tamb=25℃ unless otherwise specified）

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V(BR)_{CBO}$	Ic=0.1μA， I_E=0	30			V
Collector-emitter breakdown voltage	$V(BR)_{CEO}$	Ic=1mA， I_B=0	30			V
Emitter-base breakdown voltage	$V(BR)_{EBO}$	I_E=10μA， I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=30 V， I_E=0			0.1	μA
Collector cut-off current	I_{CEO}	V_{CE}=30 V， I_B=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}= 5 V， I_C=0			0.1	μA
DC current gain(note)	H_{FE}（1）	V_{CE}=5V, I_C=2mA	110		800	
Collector-emitter saturation voltage	V_{CE}(sat)	I_C=100mA, I_B=5mA			0.3	V
Base-emitter saturation voltage	V_{BE}(sat)	I_C=100mA, I_B=5mA			1.1	V
Base-emitter voltage	V_{BE}	V_{CE}=5V, I_C=2mA	0.58		0.7	V
Transition frequency	f_T	V_{CE}=5V, I_C=10mA f=100MHz	150			MHz

CLASSIFICATION OF HFE

Rank	1	2	3
Range	110-220	200-450	420-800