

TO-92 Plastic-Encapsulate Transistors

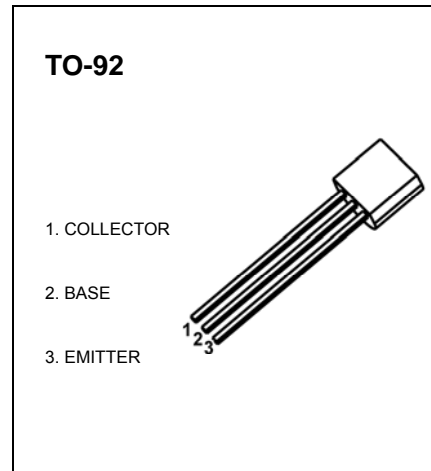
BC546/BC547/BC548 TRANSISTOR (NPN)

FEATURES

- High Voltage
- Complement to BC556,BC557,BC558

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	BC546 80 BC547 50 BC548 30	V
	Collector-Emitter Voltage	BC546 65 BC547 45 BC548 30	
	Emitter-Base Voltage	6	
I _C	Collector Current -Continuous	100	mA
P _D	Total Device Dissipation	625	mW
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55-150	°C



ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	BC546 BC547 BC548	V _{CBO}	I _C = 100μA , I _E =0	80 50 30	V
Collector-emitter breakdown voltage	BC546 BC547 BC548	V _{CEO}	I _C = 1mA , I _B =0	65 45 30	V
Emitter-base breakdown voltage	BC546 BC547 BC548	V _{EBO}	I _E = 10μA, I _C =0	6	V
Collector cut-off current	BC546 BC547 BC548	I _{CBO}	V _{CB} = 70V, I _E =0 V _{CB} = 50 V, I _E =0 V _{CB} = 30V, I _E =0	0.1	μA
Collector cut-off current	BC546 BC547 BC548	I _{CEO}	V _{CE} = 60 V, I _B =0 V _{CE} = 45 V, I _B =0 V _{CE} = 30 V, I _B =0	0.1	μA
Emitter cut-off current	BC546 BC547 BC548	I _{EBO}	V _{EB} = 5V, I _C =0	0.1	μA
DC current gain	BC546 BC547 BC548 BC546A/BC547A/BC548A BC546B/BC547B/BC548B BC546C/BC547C/BC548C	h _{FE}	V _{CE} =5V, I _C = 2mA	110 110 110 110 200 420	800 800 800 220 450 800
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
Transition frequency		f _T	V _{CE} = 5V, I _C = 10mA f = 100MHz	150	MHz