

isc Silicon NPN Plastic-Encapsulate Transistors

BC847

DESCRIPTION

- DC Current Gain-
: $h_{FE}=110-800$ @ $I_C=2\text{mA}$
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO}=45\text{V}(\text{Min.})$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

- Ideally suited for automatic insertion.
- For switching and AF amplifier applications.

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	45	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	0.1	A
P_C	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	0.2	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-65~150	$^\circ\text{C}$

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ELECTRICAL CHARACTERISTICS

 T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 10mA; I _B = 0	45		V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = 10 μ A; I _E = 0	50		V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 10 μ A; I _C = 0	6		V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 100mA; I _B = 5mA		0.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 100mA; I _B = 5mA		1.1	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 50V; I _E = 0		0.1	μ A
I _{CEO}	Collector Cutoff Current	V _{CE} = 45V; I _B = 0		0.1	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0		0.1	μ A
h _{FE}	DC Current Gain	I _C = 2mA; V _{CE} = 5V	110	800	

◆ h_{FE} Classifications

BC847A	BC847B	BC847C
110-220	200-450	420-800

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