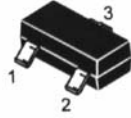




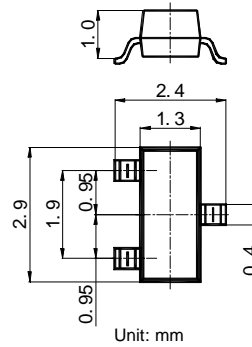
NPN Silicon Planar Epitaxial Transistors

BC846A, B
BC847A, B, C
BC848A, B, C



SOT-23

- 1. BASE
- 2. EMITTER
- 3. COLLECTOR



FEATURES

Power dissipation

P_{CM} : 0.225W ($T_{amb}=25^{\circ}C$) Note1

Collector current

I_{CM} : 0.1 A

Collector-base voltage

V_{CBO} : BC846 80 V

BC847 50 V

BC848 30 V

Operating and storage junction temperature range

T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$

Note1: Transistor mounted on an FR4 Printed-circuit board.

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	BC846 BC847 BC848	V_{CBO}	80 50 30		V
Collector-emitter breakdown voltage	BC846 BC847 BC848	V_{CEO}	65 45 30		V
Emitter-base breakdown voltage		V_{EBO}	6		V
Collector cut-off current	BC846 BC847 BC848	I_{CBO}		0.1	μA
Collector cut-off current	BC846 BC847 BC848	I_{CEO}		0.1	μA
Emitter cut-off current		I_{EBO}		0.1	μA
DC current gain	BC846A,847A,848A BC846B,847B,848B BC847C/BC848C	$H_{FE(1)}$	110 200 420	220 450 800	
Collector-emitter saturation voltage		$V_{CE(sat)}$		0.5	V
Base-emitter saturation voltage		$V_{BE(sat)}$		1.1	V
Transition frequency		f_T	100		MHz

DEVICE MARKING

BC846A=1A; BC846B=1B; BC847A=1E; BC847B=1F; BC847C=1G; BC848A=1J; BC848B=1K ; BC848C=1L