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- Moisture sensitivity level 1
- Halogen free and RoHS compliant
- Surface mount package ideally suited for automatic insertion

Application

- Signal amplification
- Switching circuit

- SOT-723
- Tin plated leads, solderable per J-STD-002 and JESD22-B102

(T_a=25 Unless otherwise specified)

	G ma V c`	l b] h	7 c b X] h] c b g	J U ` i Y
Device marking code			BC846AM3	1A
			BC846BM3	1B
			BC847AM3	1E
			BC847BM3	1F
			BC847CM3	1G
			BC848AM3	1J
			BC848BM3	1K
			BC848CM3	1L
Collector-base voltage	V _{CBO}	V	BC846 BC846	80 I _C =10uA, I _E =0



Emitter-base voltage	V_{EBO}	V^{CB}	$I_E=10\mu A, I_C=0$	6
Collector current	I_C	mA		100
Power dissipation	P_D	mW		100
Junction temperature	T_J			-55 to +150
Storage temperature	T_{STG}			-55 to +150

Collector-base breakdown voltage	$V_{(BR)CBO}$	V	BC846 BC847 BC848	$I_C=10\mu A, I_E=0$	80 50 30		
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	V	BC846 BC847 BC848	$I_C=10mA, I_B=0$	65 45 30		
Emitter-base breakdown voltage	$V_{(BR)EBO}$	V	$I_E=10\mu A, I_C=0$		6		
Collector cut-off current	I_{CBO}	μA	BC846 BC847 BC848	$V_{CB}=70V, I_E=0$ $V_{CB}=50V, I_E=0$ $V_{CB}=30V, I_E=0$			0.1 0.1 0.1
Emitter-base cutoff current	I_{EBO}	μA	$V_{EB}=5V, I_C=0$				0.1
DC current gain	h_{FE}		BC846A,847A,848A BC846B,847B,848B BC847C,BC848C	$V_{CE}=5V, I_C=2mA$ = .5	110 200 420		220 450 800
Collector-emitter saturation voltage	$V_{CE(sat)}$	V	$I_C=100mA, I_B=5mA$				0.5

$I_C=100mA, I_B=5mA$

$f_c=10MHz, f_{Tc}=400MHz, I_C=10mA$

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Thermal resistance, junction-to-ambient	R J-A ⁽¹⁾	/W	1250
Thermal resistance, junction-to-case	R J-C ⁽¹⁾	/W	1000

Note:

1 Thermal resistance from junction to ambient and from junction to case mounted on P.C.B. with 25.4mm*25.4mm copper pad areas





