MSKSEMI















ESD

TVS

TSS

MOV

GDT

PLED

Broduct data sheet









1. BASE

SOT - 23

3. COLLECTOR

FEATURES

Ideally suited for automatic insertion For switching and AF amplifier applications

DEVICE MARKING

P/N	MARK	P/N	MARK	P/N	MARK
BC846A	1A	BC847A	1E	BC848A	1J
BC846B	1B	BC847B	1F	BC848B	1K
BC846C	1C	BC847C	1G	BC848C	1L

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

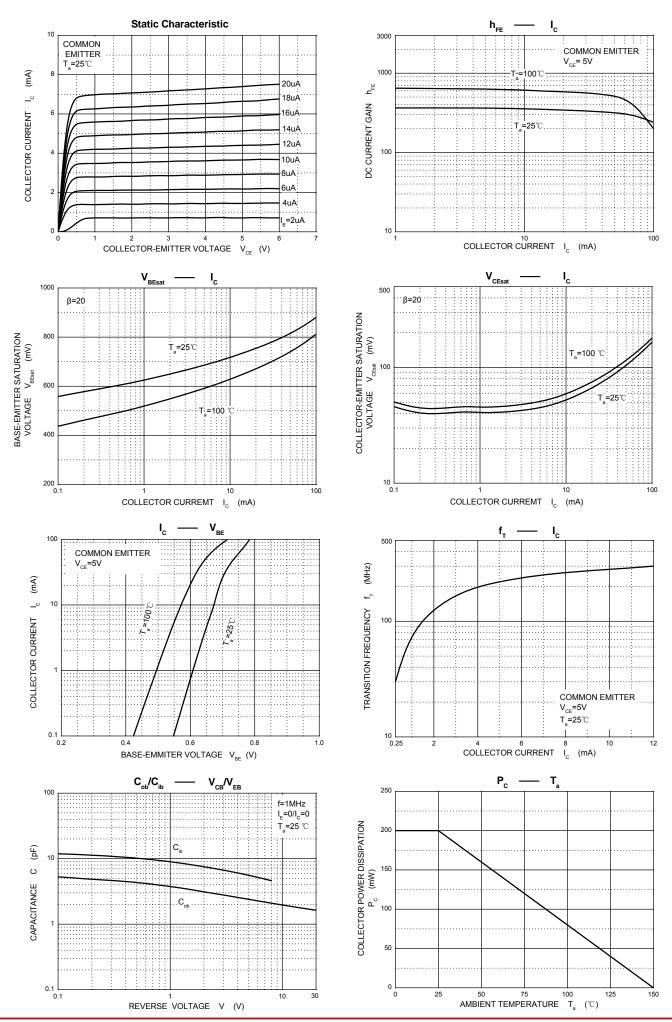
Symbol	Parameter		Value	Unit
V _{CBO}	Collector-Base Voltage			V
	BC84	16	80	
	BC84	1 7	50	
	BC84	18	30	
V _{CEO}	Collector-Emitter Voltage			V
	BC84	16	65	
	BC84	17	45	
	BC84	18	30	
V _{EBO}	Emitter-Base Voltage		6	V
Ic	Collector Current –Continuous		0.1	Α
Pc	Collector Power Dissipation		200	mW
R _{OJA}	Thermal Resistance From Junction To Ambient		625	°C/W
TJ	Junction Temperature		150	°C
T _{stg}	Storage Temperature		-55~+150	°C



ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

Parameter		Symbol	Test conditions	Min	Тур	Max	Unit
Collector-base breakdown voltage	BC846			80			
	BC847	V_{CBO}	I _C = 10μΑ, I _E =0	50			V
	BC848			30			
Collector-emitter breakdown voltage	BC846			65			
	BC847	V_{CEO}	I _C = 10mA, I _B =0	45			V
	BC848			30			
Emitter-base breakdown voltage		V_{EBO}	I _E = 10μΑ, I _C =0	6			V
Collector cut-off current	BC846		V _{CB} =70 V , I _E =0				
	BC847	I_{CBO}	V _{CB} =50 V , I _E =0			0.1	μΑ
	BC848		V _{CB} =30 V , I _E =0				
Collector cut-off current	BC846		V _{CE} =60 V , I _B =0				
	BC847	I _{CEO}	V _{CE} =45 V , I _B =0			0.1	μΑ
	BC848		V _{CE} =30 V , I _B =0				
Emitter cut-off current		I _{EBO}	V _{EB} =5 V , I _C =0			0.1	μΑ
DC current gain BC8	346A,847A,848A			110		220	
BC8	846B,847B,848B	h_{FE}	V_{CE} = 5V, I_{C} = 2mA	200		450	
BC846C,I	BC847C,BC848C			420		800	
Collector-emitter saturation voltage		V _{CE} (sat)	I _C =100mA, I _B = 5mA			0.5	V
Base-emitter saturation voltage		V _{BE} (sat)	I _C =100mA, I _B = 5mA			1.1	٧
Transition frequency		f⊤	V _{CE} = 5 V, I _C = 10mA f=100MHz	100			MHz
Collector output capacitance		C _{ob}	V _{CB} =10V,f=1MHz			4.5	pF





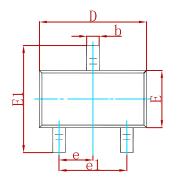


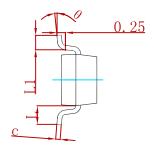
Compiance

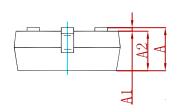




PACKAGE MECHANICAL DATA

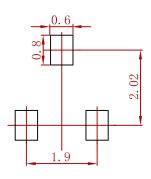






Symbol	Dimensions	In Millimeters	Dimensions In Inches		
Symbol	Min	Max	Min	Max	
Α	0.900	1.150	0.035	0.045	
A1	0.000	0.100	0.000	0.004	
A2	0.900	1.050	0.035	0.041	
b	0.300	0.500	0.012	0.020	
С	0.080	0.150	0.003	0.006	
D	2.800	3.000	0.110	0.118	
E	1.200	1.400	0.047	0.055	
E1	2.250	2.550	0.089	0.100	
е	0.950 TYP		0.037 TYP		
e1	1.800	2.000	0.071	0.079	
L	0.550 REF		0.022 REF		
L1	0.300	0.500	0.012	0.020	
θ	0°	8°	0°	8°	

Suggested Pad Layout



- 1.Controlling dimension:in millimeters.2.General tolerance:± 0.05mm.3.The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
BC846/BC847/BC848	SOT-23	3000





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