# TDSEMIC 拓電半導體

# 自主封測 品質把控 售後保障

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電源管理 顯示驅動 二三極管 LDO穩壓器 觸摸芯片











MOS管 運算放大器 存儲芯片

MCU

串口通信

BC846C-TD

產品規格說明書



#### **♦** Features

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



#### ◆ Absolute Maximum Ratings(Ta=25°C)

Symbol	Parameter	Part	Value	Unit
V <sub>CBO</sub>	Collector-Base Voltage	BC846	80	V
		BC847	50	
		BC848	30	
V <sub>CEO</sub>	Collector-Emitter Voltage	BC846	65	V
		BC847	45	
		BC848	30	
V <sub>EBO</sub>	Emitter-Base Voltage		6	V
Ic	Collector Current		100	mA
Pc	Collector Power Dissipation		200	mW
R <sub>ΘJA</sub>	Thermal Resistance From Junction To Ambient		625	°CNV
T <sub>J</sub> ,T <sub>stg</sub>	Operation Junction And Storage Temperature Range		-55∼+150	$^{\circ}$

#### ♦ Electrical Characteristics (Ta=25°C unless otherwise specified)

Symbol	Parameter		Test conditions	Min	Max	Unit
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	BC846 BC847	I <sub>C</sub> =10μΑ, I <sub>E</sub> =0	80 50		V
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	BC848 BC846 BC847 BC848	I <sub>C</sub> =10mA, I <sub>B</sub> =0	30 65 45 30		V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	200.0	I <sub>E</sub> =10μΑ, I <sub>C</sub> =0	6		V
I <sub>CBO</sub>	Collector cut-off current	BC846 BC847 BC848	V <sub>CB</sub> =70V, I <sub>E</sub> =0 V <sub>CB</sub> =50V, I <sub>E</sub> =0 V <sub>CB</sub> =30V, I <sub>E</sub> =0		100	nA
I <sub>EBO</sub>	Emitter cut-off current		V <sub>EB</sub> =5V, I <sub>C</sub> =0		100	nA
h <sub>FE</sub>	DC current gain	BC846A BC847A BC848A BC846B BC847B BC848B BC846C BC847C BC848C	V <sub>CE</sub> =5V, I <sub>C</sub> =2mA	110 200 420	220 450 800	
V <sub>CE(sat)</sub>	Collector-emitter saturation voltage		1 - 100 1 - 5 1		0.5	V
V <sub>BE(sat)</sub>	Base-emitter saturation voltage		I <sub>C</sub> =100mA, I <sub>B</sub> =5mA		1.1	V
f <sub>T</sub>	Transition frequency		V <sub>CE</sub> =5V, I <sub>C</sub> =10mA, f=30MHz	100		MHz
Cob	Collector output capacitance		V <sub>CB</sub> =10V,f= 1MHz		4.5	pF

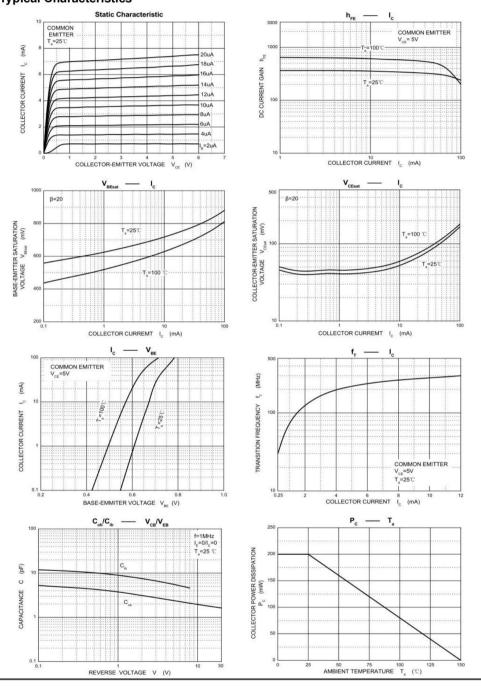
#### Marking



BC846A=1A; BC846B=1B; BC846C=1C; BC847A=1E; BC847B=1F; BC847C=1G; BC848A=1J; BC848B=1K; BC848C=1L;

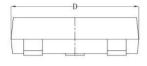


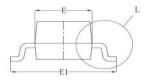
## **◆** Typical Characteristics

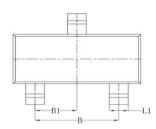


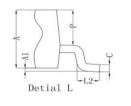


## ◆ SOT-23 Package Outline Dimensions









Comb v 1	Dim in mm			
Symbol -	Min	Nom	Max	
A	0. 900	1.000	1. 100	
A1	0.000	0.050	0.100	
В	1.800	1. 900	2.000	
B1	0. 950 TYP			
С	0.100	0.110	0. 120	
D	2.800	2. 900	3.000	
Е	1. 250	1. 300	1. 350	
E1	2. 250	2.400	2.550	
L1	0.350	0.400	0. 500	
L2	0. 200	0.350	0. 450	
Р	0.550	0. 575	0. 600	

## ◆ Packaging SPEC.

Units					
Units/Reel	Reels/Inner Box	Units/Inner Box	ox Inner Boxes/Outer Box Units/Ou		
3,000	15	45,000	4	180,000	
Dool	Dimension (unit: mm³)				
Reel	Inner Box		Outer Box		
7" × 8	190×190×190		400×400×210		