NPN General Purpose Transistor

BC847B / BC847C

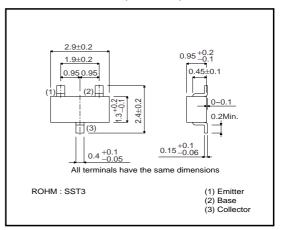
Features

- 1) BVcEo < 45V (Ic=1mA)
- 2) Complements the BC857B.

● Package, marking, and Packaging specifications

Part No.	BC847B	BC847C
Packaging type	SST3	SST3
Marking	G1F	G1G
Code	T116	T116
Basic ordering unit (pieces)	3000	3000

●External dimensions (Units : mm)



● Absolute maximum ratings (Ta=25°C)

Parameter	Symbol Limits		Unit	
Collector-base voltage	Vсво	50	V	
Collector-emitter voltage	Vceo	45	V	
Emitter-base voltage	Vebo 6		V	
Collector current	lc	0.1	A	
Collector power dissipation	Pc	0.2	w *	
	FC	0.35]	
Junction temperature	Tj	150	°C	
Storage temperature	Tstg	−55~+150	°C	

^{*} When mounted on a 7×5×0.6mm ceramic board.

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Collector-base breakdown voltage	ВУсво	50	-	-	V	Ic=50μA
Collector-emitter breakdown voltage	BVceo	45	-	-	V	Ic=1mA
Emitter-base breakdown voltage	ВУЕВО	6	-	-	V	Iε=50μA
Collector cutoff current	1	-	-	15	nA	Vcb=30V
	Ісво	_	-	5	μΑ	Vcв=30V, Ta=150°С
Collector-emitter saturation voltage	VCE(sat)	-	-	0.25	٧	Ic/I _B =10mA/0.5mA
		_	-	0.6		Ic/I _B =100mA/5mA
Base-emitter saturation voltage	V _{BE} (on)	0.58	-	0.77	V	Vce/Ic=5V/10mA
DC current transfer ratio	hfe	200	-	450	-	Vce/Ic=5V/2mA BC847B
		420	-	800	-	Vce/lc=5V/2mA BC847C
Transition frequency	f⊤	-	200	-	MHz	VcE=5V, IE=-20mA, f=100MHz
Collector output capacitance	Cob	_	3	_	pF	Vcb=-10V, IE=0, f=1MHz
Emitter input capacitance	Cib	_	8	-	pF	Veb=0.5V, Ic=0, f=1MHz

• Electrical characteristic curves

The electrical characteristic curves for these products are the same as those of UMT222A, SST222A, MMST2222A and PN2222A.



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