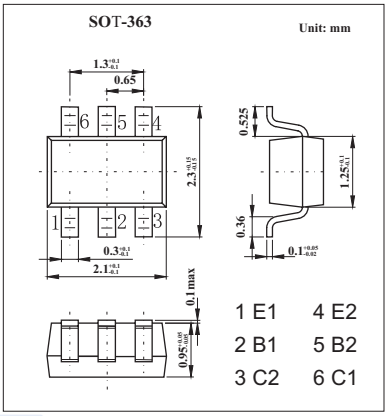
NPN Multi-Chip General Purpose Amplifier

KC847S(BC847S)



■ Features

- ●High current gain
- ●Low collector-emitter saturation voltage

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	45	V
Emitter-Base Voltage	V_{EBO}	6.0	V
Collector Current	I_C	100	mA
Total Device Dissipation	P_D	300	mW
Derate above 25℃		2.4	mW/℃
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	415	℃/W
Operating and Storage Junction Temperature Range	T_J, T_{stg}	-55 to +150	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	V_{CBO}	I_C = 10 μA, I_E = 0	50			V
Collector-Emitter Breakdown Voltage	V_{CEO}	I_C = 10 mA, I_B = 0	45			V
Emitter-Base Breakdown Voltage	V_{EBO}	I_E = 10 μA, I_C = 0	6.0			V
Collector-Cutoff Current	I_{CBO}	V_{CB} = 30 V, I_E = 0			15	nA
		V_{CB} = 30 V, I_E = 0, T_A = 150℃			5.0	μA
DC Current Gain	h_{FE}	I_C = 2.0 mA, V_{CE} = 5.0 V	110		630	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 10 mA, I_B = 0.5 mA			0.25	V
		I_C = 100 mA, I_B = 5.0 mA			0.65	V
Base-Emitter ON Voltage	$V_{BE(on)}$	I_C = 2.0 mA, V_{CE} = 5.0 V	0.58		0.7	V
		I_C = 10 mA, V_{CE} = 5.0 V			0.77	V
Output Capacitance	C_{ob}	V_{CB} = 10 V, f = 1.0 MHz		2.0		pF
Transistion frequency	f_T	I_C = 20 mA, V_{CE} = 5.0,f = 100 mHz		200		MHz

■ Marking

Marking	1C