2SC5845

Transistors

Silicon NPN epitaxial planar type

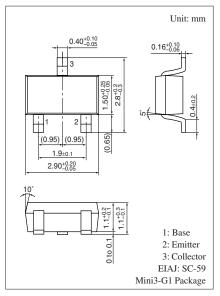
For general amplification

■ Features

- High forward current transfer ratio h_{FE}
- Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing

■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	V _{CBO}	60	V	
Collector-emitter voltage (Base open)	V _{CEO}	50	V	
Emitter-base voltage (Collector open)	V_{EBO}	7	V	
Collector current	I_{C}	100	mA	
Peak collector current	I_{CP}	200	mA	
Collector power dissipation	P _C	200	mW	
Junction temperature	T _j	150	°C	
Storage temperature	T _{stg}	-55 to +150	°C	

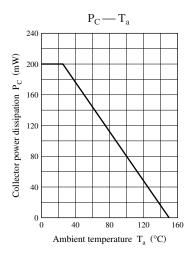


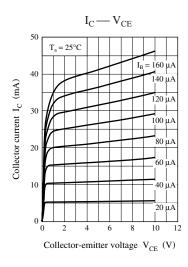
Marking Symbol: 7M

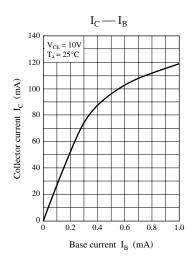
■ Electrical Characteristics $T_a = 25$ °C ± 3 °C

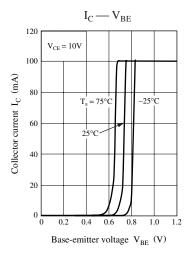
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V _{CBO}	$I_C = 10 \mu\text{A}, I_E = 0$	60			V
Collector-emitter voltage (Base open)	V _{CEO}	$I_C = 2 \text{ mA}, I_B = 0$	50			V
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = 10 \ \mu A, I_C = 0$	7			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = 20 \text{ V}, I_{E} = 0$			0.1	μΑ
Collector-emitter cutoff current (Base open)	I_{CEO}	$V_{CE} = 10 \text{ V}, I_{B} = 0$			100	μΑ
Forward current transfer ratio	h _{FE}	$V_{CE} = 10 \text{ V}, I_{C} = 2 \text{ mA}$	160		460	_
Collector-emitter saturation voltage	V _{CE(sat)}	$I_C = 100 \text{ mA}, I_B = 10 \text{ mA}$		0.1	0.3	V
Collector output capacitance	C _{ob}	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		2.2		pF
(Common base, input open circuited)						
Transition frequency	f_T	$V_{CB} = 10 \text{ V}, I_{E} = -2 \text{ mA}, f = 200 \text{ MHz}$		100		MHz

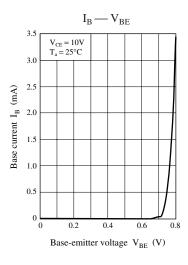
Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

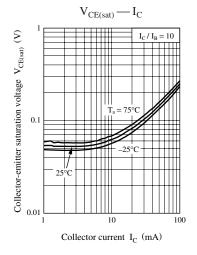


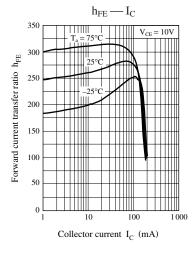


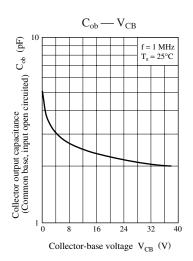












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