

2SC4985

Silicon NPN epitaxial planar type

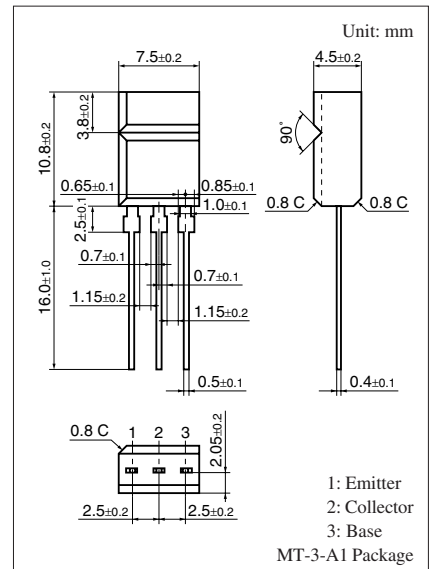
For high breakdown voltage high-speed switching

■ Features

- High collector-base voltage (Emitter open) V_{CBO}
- High collector-emitter voltage (Base open) V_{CEO}
- Allowing automatic insertion with radial taping

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

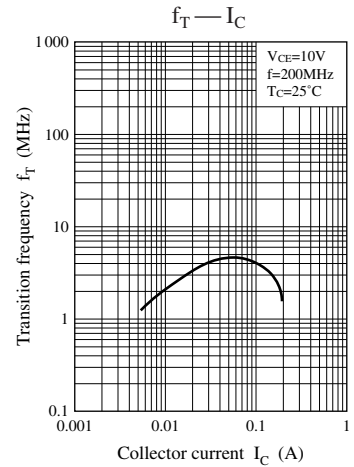
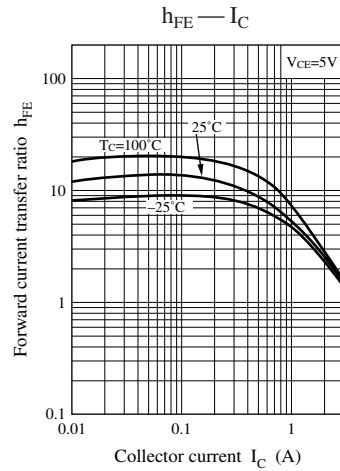
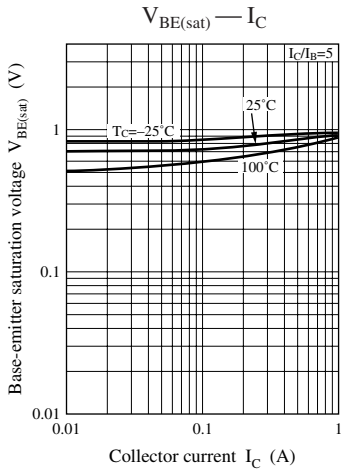
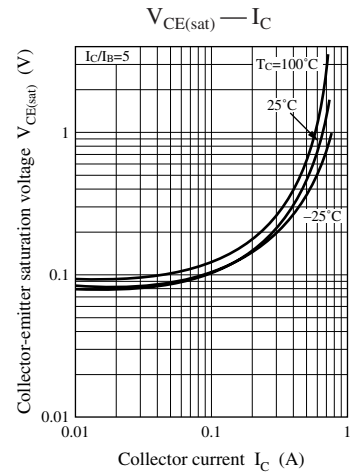
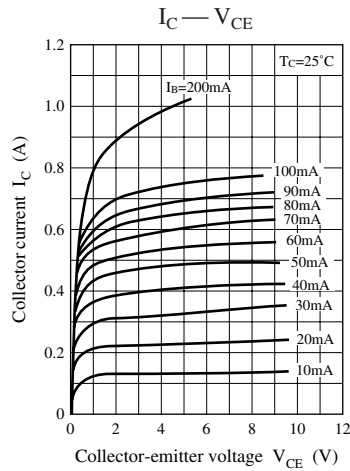
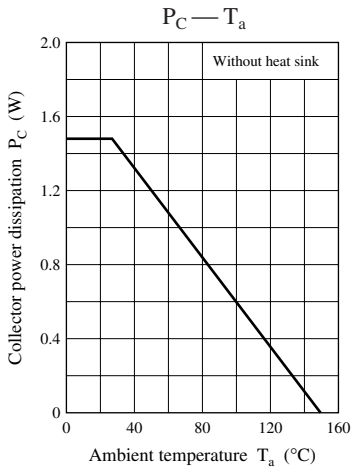
Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	900	V
Collector-emitter voltage (Base open)	V_{CEO}	800	V
Emitter-base voltage (Collector open)	V_{EBO}	7	V
Collector current	I_C	1	A
Peak collector current	I_{CP}	2	A
Collector power dissipation	P_C	1.5	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$



■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = 1 \text{ mA}, I_B = 0$	800			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = 900 \text{ V}, I_E = 0$			50	μA
Emitter-base cutoff current (Collector open)	I_{EBO}	$V_{EB} = 7 \text{ V}, I_C = 0$			50	μA
Forward current transfer ratio	h_{FE1}	$V_{CE} = 5 \text{ V}, I_C = 50 \text{ mA}$	6			—
	h_{FE2}	$V_{CE} = 5 \text{ V}, I_C = 500 \text{ mA}$	3			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 200 \text{ mA}, I_B = 40 \text{ mA}$			1.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 200 \text{ mA}, I_B = 40 \text{ mA}$			1	V
Transition frequency	f_T	$V_{CB} = 10 \text{ V}, I_E = -50 \text{ mA}, f = 200 \text{ MHz}$		80		MHz
Turn-on time	t_{on}	$I_C = 200 \text{ mA}$			1	μs
Storage time	t_{stg}	$I_{B1} = 40 \text{ mA}, I_{B2} = -80 \text{ mA}$			3	μs
Fall time	t_f	$V_{CC} = 250 \text{ V}$			1	μs

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



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