2SC3942

Silicon NPN triple diffusion planar type

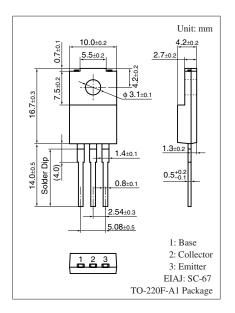
For color TV chroma output

■ Features

- ullet High collector-emitter voltage (Base open) V_{CEO}
- Small collector output capacitance (Common base, input open circuited) Cob
- Full-pack package which can be installed to the heat sink with one screw

■ Absolute Maximum Ratings $T_a = 25$ °C

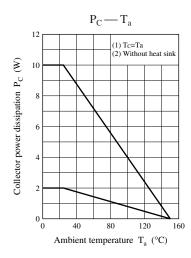
Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	V _{CBO}	300	V	
Collector-emitter voltage (Base open)	V _{CEO}	300	V	
Emitter-base voltage (Collector open)	V _{EBO}	7	V	
Collector current	I_{C}	0.1	A	
Peak collector current	I_{CP}	0.2	A	
Collector power $T_C = 25^{\circ}C$	P _C	10	W	
dissipation		2		
Junction temperature	Tj	150	°C	
Storage temperature	T _{stg}	-55 to +150	°C	

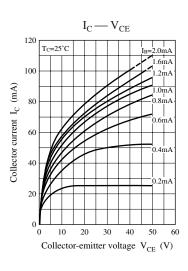


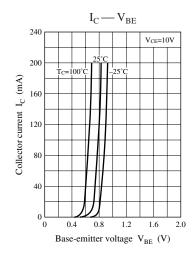
■ Electrical Characteristics $T_a = 25$ °C ± 3 °C

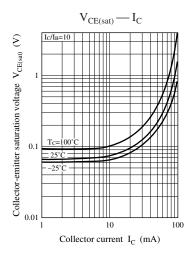
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V _{CBO}	$I_C = 10 \mu\text{A}, I_E = 0$	300			V
Collector-emitter voltage (Base open)	V _{CEO}	$I_C = 1 \text{ mA}, I_B = 0$	300			V
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = 10 \ \mu A, I_C = 0$	7			V
Base-emitter voltage	V _{BE}	$V_{CE} = 10 \text{ V}, I_{C} = 30 \text{ mA}$			1.2	V
Collector-emitter cutoff current (Base open)	I_{CEO}	$V_{CE} = 200 \text{ V}, I_{B} = 0$			10	μΑ
Forward current transfer ratio	h _{FE}	$V_{CE} = 50 \text{ V}, I_{C} = 5 \text{ mA}$	50		250	_
Collector-emitter saturation voltage	V _{CE(sat)}	$I_C = 30 \text{ mA}, I_B = 3 \text{ mA}$			1.5	V
Transition frequency	f_T	$V_{CE} = 30 \text{ V}, I_{C} = 20 \text{ mA}, f = 10 \text{ MHz}$	70	140		MHz
Collector output capacitance	C _{ob}	$V_{CB} = 30 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		2.7		pF
(Common base, input open circuited)						

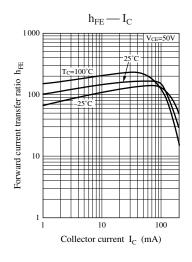
Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

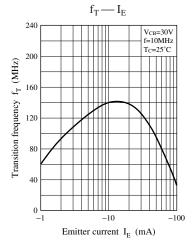


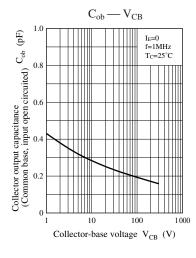


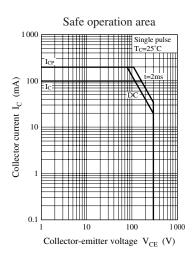












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