

2SC3942

Silicon NPN triple diffusion planar type

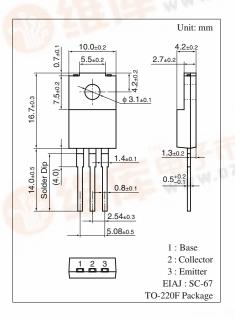
For color TV chroma output

■ Features

- High collector to emitter voltage V_{CEO}
- Small collector output capacitance Cob
- Full-pack package which can be installed to the heat sink with one screw

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

Parameter		Symbol	Rating	Unit
Collector to base voltage		V_{CBO}	300	V
Collector to emitter voltage		V_{CEO}	300	V
Emitter to base voltage		V _{EBO}	7	V
Peak collector current		I_{CP}	200	mA
Collector current		I_C	100	mA
Collector power	$T_C = 25^{\circ}C$	P_{C}	10	W
dissipation	$T_a = 25^{\circ}C$		2.0	
Junction temperature		T _j	150	°C
Storage temperature		T_{stg}	-55 to +150	°C
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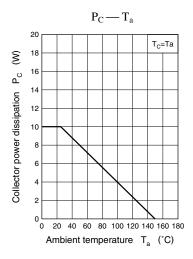


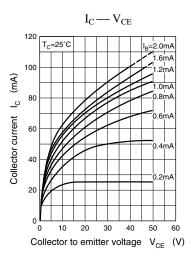
■ Electrical Characteristics T_C = 25°C

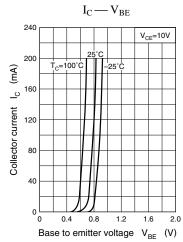
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector cutoff current	I_{CEO}	$V_{CE} = 200 \text{ V}, I_{B} = 0$			10	μΑ
Collector to base voltage	V_{CBO}	$I_C = 10 \ \mu A, I_E = 0$	300			V
Collector to emitter voltage	V_{CEO}	$I_{\rm C} = 1 \text{ mA}, I_{\rm B} = 0$	300			V
Emitter to base voltage	V_{EBO}	$I_E = 10 \ \mu A, \ I_C = 0$	7			V
Forward current transfer ratio	h _{FE}	$V_{CE} = 50 \text{ V}, I_{C} = 5 \text{ mA}$	50	1177	250	ALM N
Base to emitter voltage	V_{BE}	$V_{CE} = 10 \text{ V}, I_{C} = 30 \text{ mA}$			1.2	V
Collector to 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

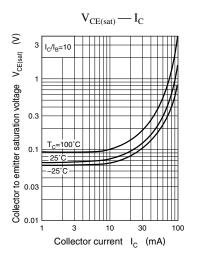


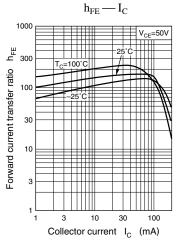
2SC3942 Power Transistors

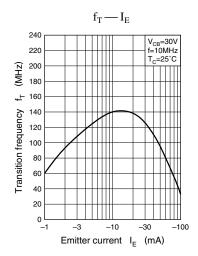


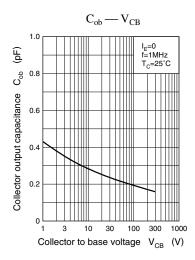


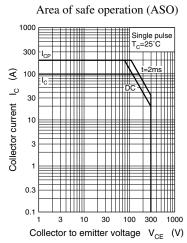












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