# 2SC3965

### Silicon NPN triple diffusion planer type

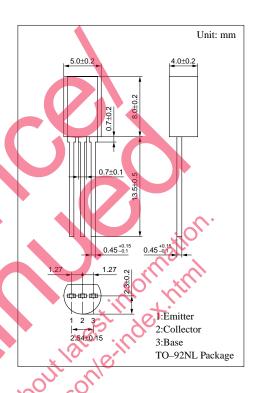
For small TV video output

#### Features

- High collector to emitter voltage V<sub>CEO</sub>.
- Small collector output capacitance C<sub>ob</sub>.
- Allowing supply with the radial taping.

#### Absolute Maximum Ratings (Ta=25°C)

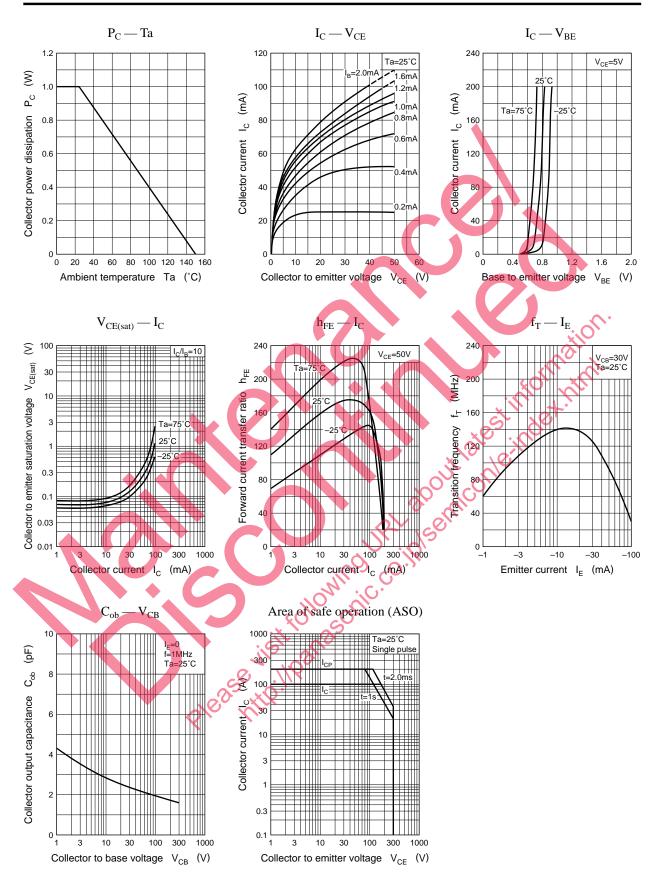
Parameter	Symbol	Ratings	Unit
Collector to base voltage	V <sub>CBO</sub>	300	V
Collector to emitter voltage	V <sub>CEO</sub>	300	V
Emitter to base voltage	V <sub>EBO</sub>	7	V
Peak collector current	$I_{CP}$	200	mA
Collector current	$I_{C}$	100	mA
Collector power dissipation	P <sub>C</sub>	1	W
Junction temperature	$T_{\rm j}$	150	°C
Storage temperature	$T_{stg}$	−55 ~ +1 <del>5</del> 0	°C



#### Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	min	typ	max	Unit
Collector to base voltage	$V_{CBO}$	$I_C = 10\mu A, I_E = 0$	300			V
Collector to emitter voltage	V <sub>CEO</sub>	$I_{\rm C} = 100 \mu {\rm A}, I_{\rm B} = 0$	300			V
Emitter to base voltage	$V_{\rm EBO}$	$I_{\rm E} = 100A, I_{\rm C} = 0$	7			V
Forward current transfer ratio	h <sub>FE</sub>	$V_{CE} = 50V$ , $I_C = 5mA$	50		250	
Base to emitter voltage	V <sub>BE</sub>	$V_{CE} = 10V, I_{C} = 30mA$			1.2	V
Collector to emitter saturation voltage	V <sub>CE(sat)</sub>	$I_C = 30 \text{mA}, I_B = 3 \text{mA}$			1.5	V
Transition frequency	$f_T$	$V_{CB} = 30V, I_E = -20mA, f = 200MHz$	70	140		MHz
Collector output capacitance	C <sub>ob</sub>	$V_{CB} = 30V, I_{E} = 0, f = 1MHz$		2.4		pF

Transistor 2SC3965



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