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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

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## Transistors

**2SC3941**

## Silicon NPN triple diffusion planar type

For high breakdown voltage general amplification

For small TV video output

Complementary to 2SA1858

**■ Features**

- High collector-emitter voltage (Base open)  $V_{CEO}$
- High transition frequency  $f_T$
- Allowing supply with the radial taping

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

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	$I_C$	70	mA
Peak collector current	$I_{CP}$	100	mA
Collector power dissipation	$P_C$	1	W
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

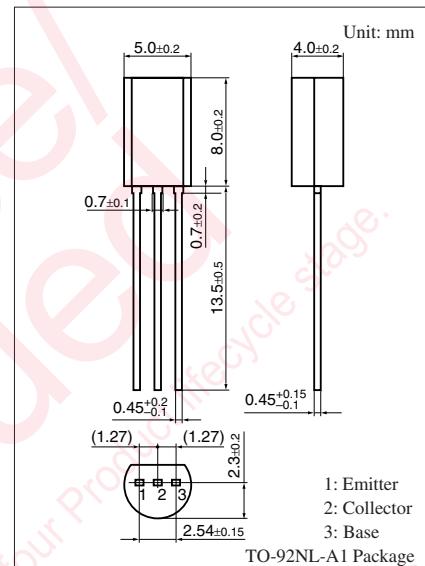
**■ Electrical Characteristics**  $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$ 

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-emitter voltage (Base open)	$V_{CEO}$	$I_C = 100 \mu\text{A}, I_B = 0$	300			V
Emitter-base voltage (Collector open)	$V_{EBO}$	$I_E = 1 \mu\text{A}, I_C = 0$	7			V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{CB} = 100 \text{ V}, I_E = 0$			2	$\mu\text{A}$
Forward current transfer ratio *	$h_{FE}$	$V_{CE} = 10 \text{ V}, I_C = 5 \text{ mA}$	30		220	—
Collector-emitter saturation voltage	$V_{CE(\text{sat})}$	$I_C = 50 \text{ mA}, I_B = 5 \text{ mA}$			1.2	V
Transition frequency	$f_T$	$V_{CB} = 10 \text{ V}, I_E = -10 \text{ mA}, f = 200 \text{ MHz}$	50	80		MHz
Collector output capacitance (Common base, input open circuited)	$C_{ob}$	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		4	8	pF
Storage time	$t_{stg}$	$I_C = 100 \text{ mA}, I_{B1} = 10 \text{ mA}, I_{B2} = 0$			2.5	$\mu\text{s}$

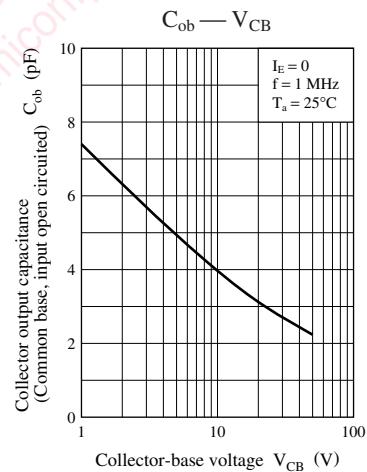
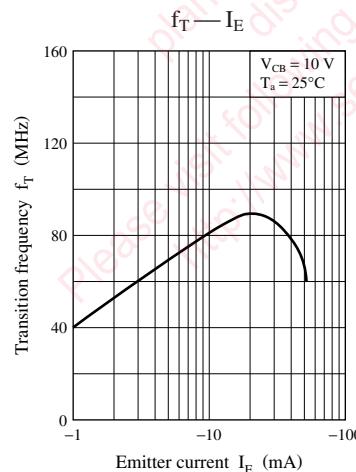
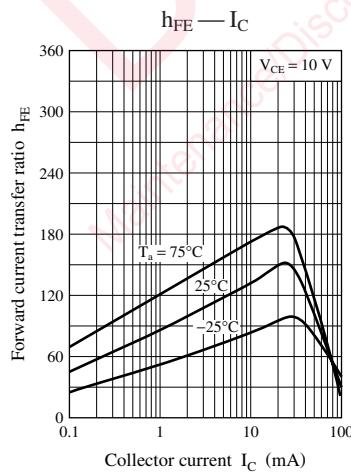
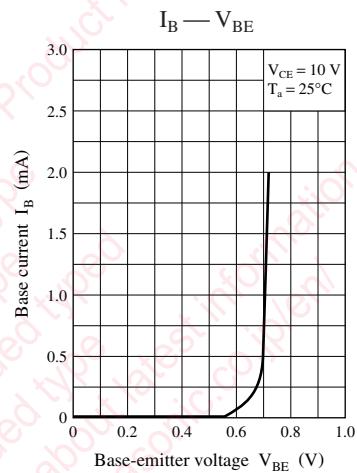
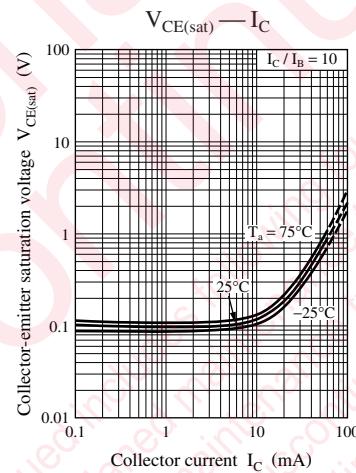
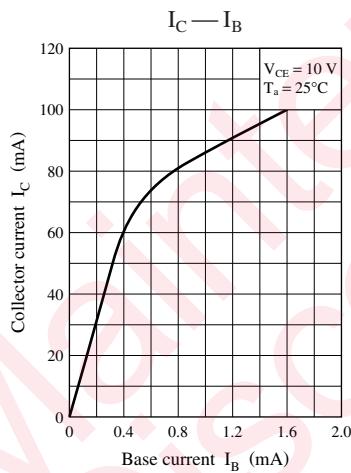
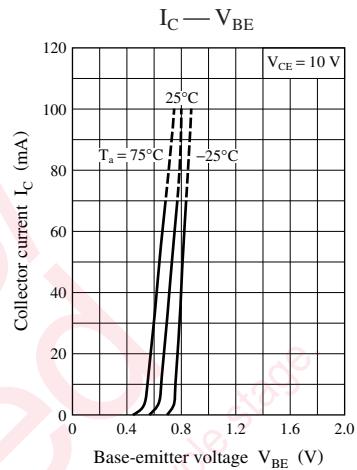
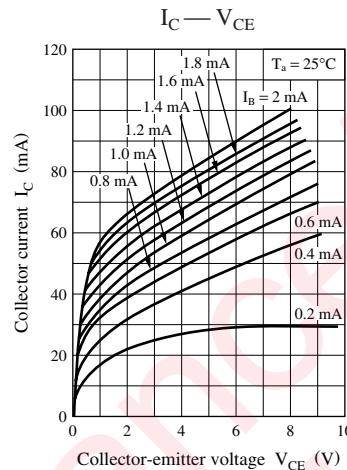
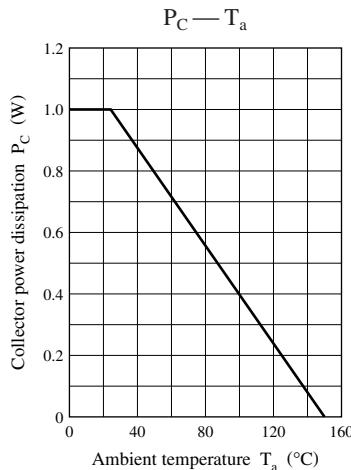
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

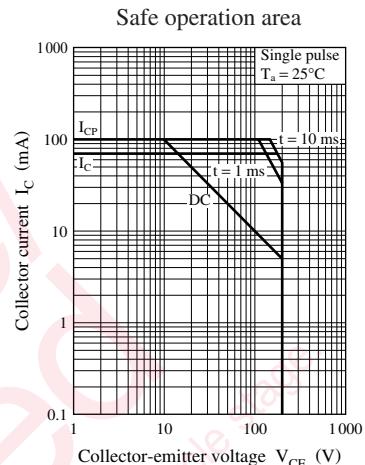
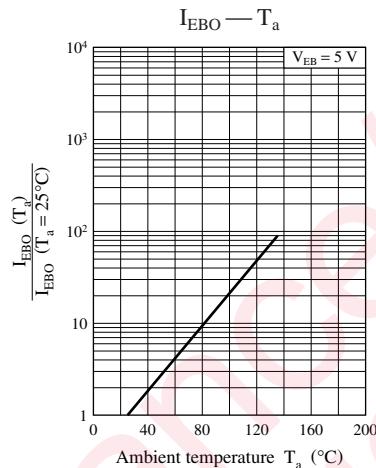
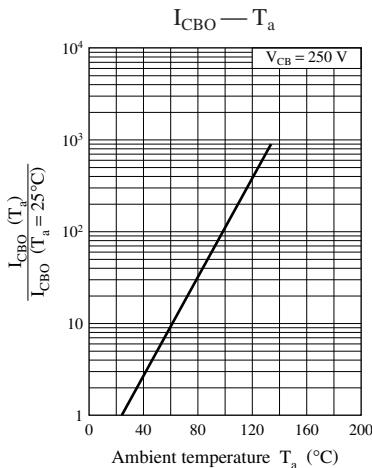
2. \*: Rank classification

Rank	P	Q	R
$h_{FE}$	30 to 100	60 to 150	100 to 220



TO-92NL-A1 Package





Maintenance/Discontinued includes following four Product lifecycle type  
 planned maintenance type  
 planned discontinued type  
 discontinued type  
 discontinued type  
 Please visit following URL about latest information.  
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