



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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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	$^\circ\text{C}$

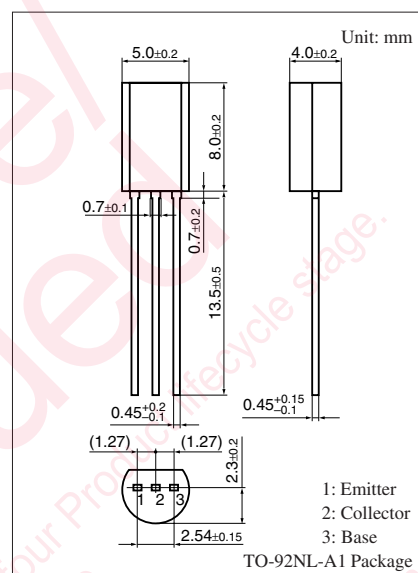
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

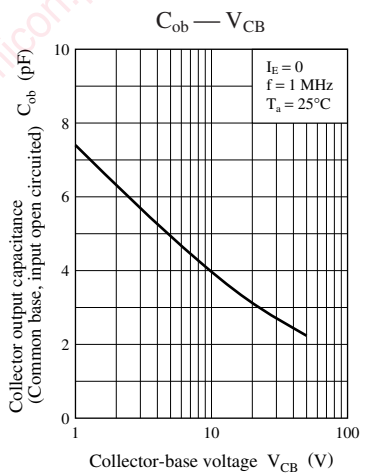
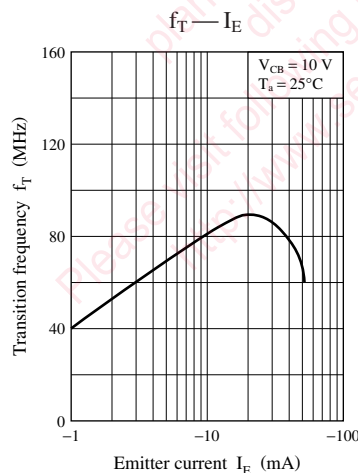
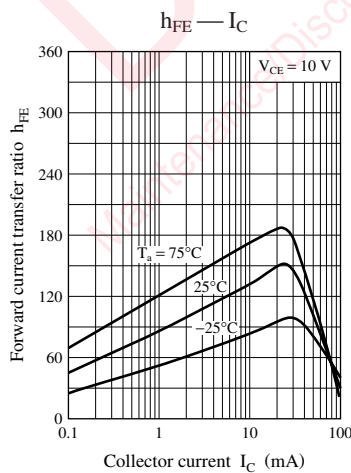
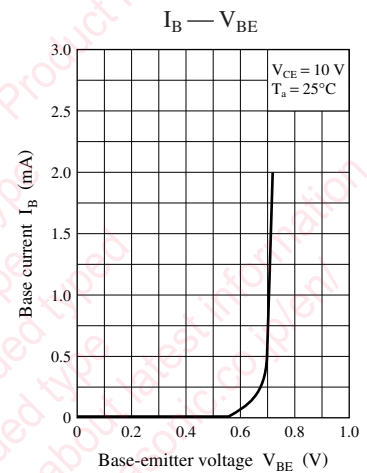
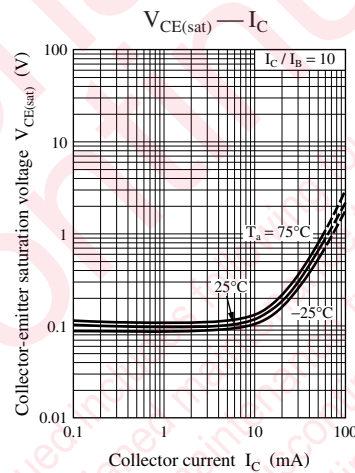
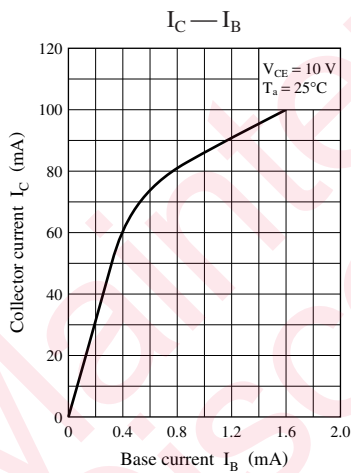
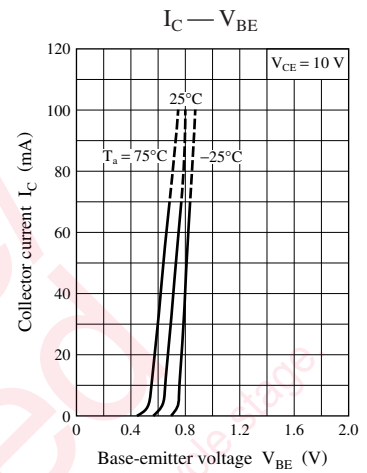
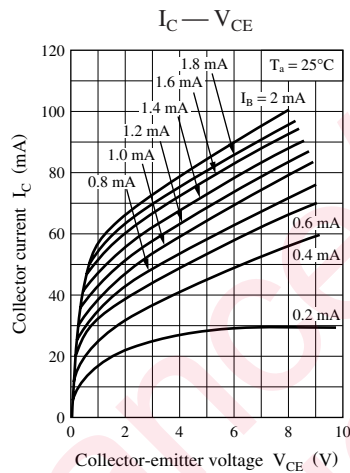
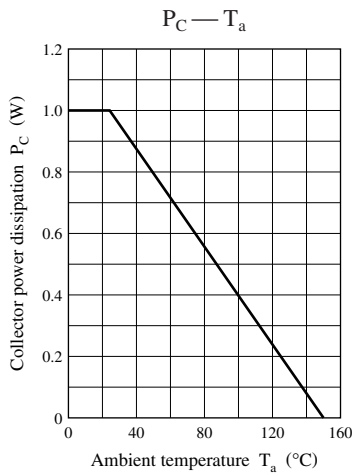
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = 100\ \mu\text{A}$, $I_B = 0$	300			V
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = 1\ \mu\text{A}$, $I_C = 0$	7			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = 100\ \text{V}$, $I_E = 0$			2	μA
Forward current transfer ratio *	h_{FE}	$V_{CE} = 10\ \text{V}$, $I_C = 5\ \text{mA}$	30		220	—
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 50\ \text{mA}$, $I_B = 5\ \text{mA}$			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		μs

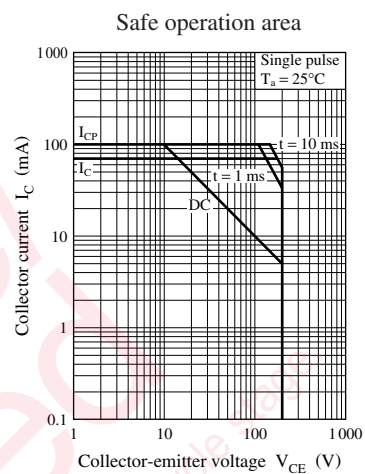
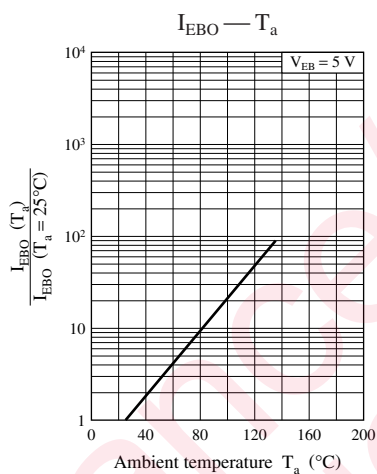
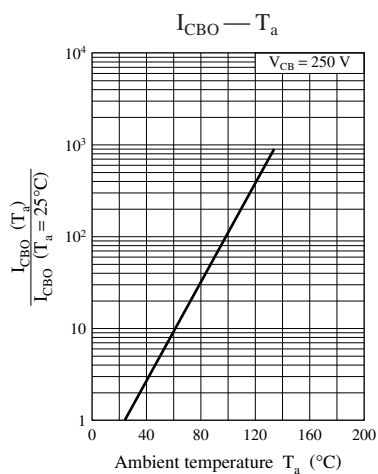
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. *: Rank classification

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







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