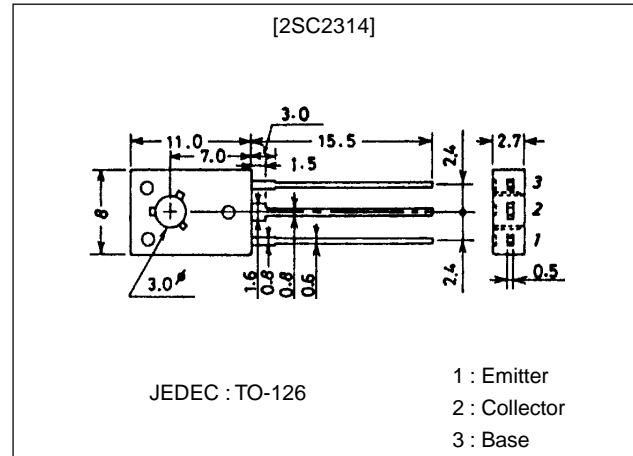


**2SC2314****27MHz CB Transceiver Driver Applications****Package Dimensions**

unit:mm

2009B

**Specifications****Absolute Maximum Ratings at Ta = 25°C**

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CB0}	$R_{BE}=150\Omega$	75	V
Collector-to-Emitter Voltage	V_{CER}		75	V
Collector-to-Emmitter Voltage	V_{CEO}		45	V
Emitter-to-Base Voltage	V_{EBO}		5	V
Collector Current	I_C		1.0	A
Collector Current (Pulse)	I_{CP}		1.5	A
Collector Dissipation	P_C		750	mW
		$T_c=25^\circ\text{C}$	5	W
Junction Temperature	T_j		150	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +150	$^\circ\text{C}$

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB}=40\text{V}, I_E=0$			1.0	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=4\text{V}, I_C=0$			1.0	μA
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu\text{A}, I_E=0$	75			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CER}$	$I_C=1\text{mA}, R_{BE}=150\Omega$	75			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, R_{BE}=\infty$	45			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10\mu\text{A}, I_C=0$	5			V

* : The 2SC2314 are classified by 500mA h_{FE} as follows :

60	D	120	100	E	200	160	F	320
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■ Any and all SANYO products described or contained herein do not have specifications that can handle applications that require extremely high levels of reliability, such as life-support systems, aircraft's control systems, or other applications whose failure can be reasonably expected to result in serious physical and/or material damage. Consult with your SANYO representative nearest you before using any SANYO products described or contained herein in such applications.

■ SANYO assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all SANYO products described or contained herein.

SANYO Electric Co., Ltd. Semiconductor Business Headquarters

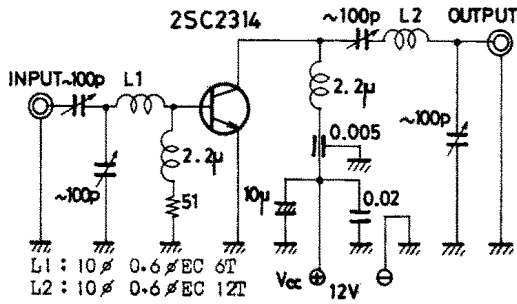
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

N1098HA (KT)/2090MO/4147KI/1165MW, TS No.485-1/4

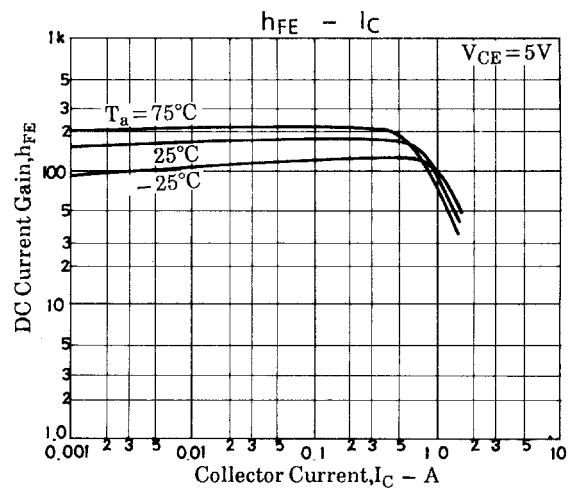
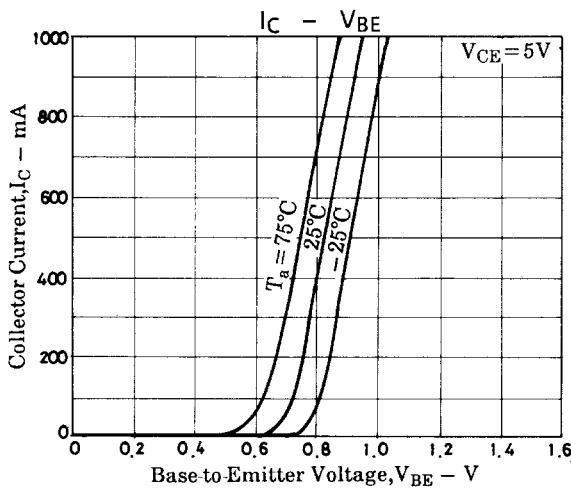
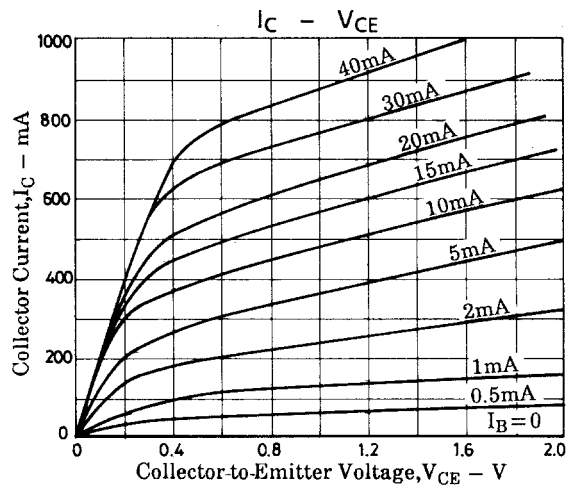
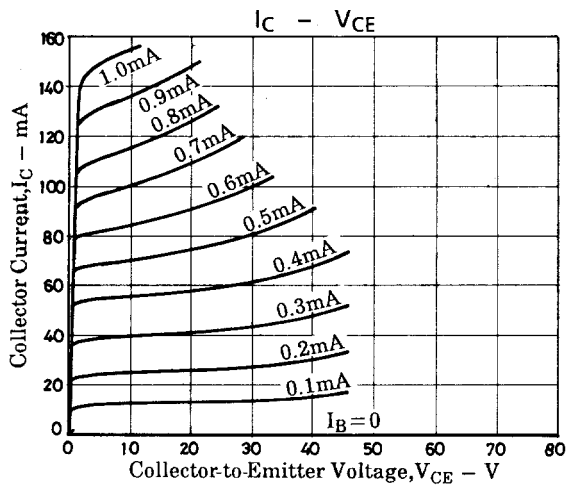
2SC2314

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=500mA$	60*		320*	
Gain-Bandwidth Product	f_T	$V_{CE}=10V, I_C=50mA$	180	250		MHz
Output Capacitance	C_{ob}	$V_{CB}=10V, f=1MHz$		15	25	pF
Output Power	P_O	$V_{CC}=12V, f=27MHz, P_i=35mW$	1.0	1.8		W
Collector Efficiency	η_c	See specified test circuit.	60			%
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$		0.2	0.6	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=500mA, I_B=50mA$		0.9	1.2	V

Collector Efficiency Test Circuit



Unit (resistance : Ω , capacitance : F)



2SC2314

