

SANYO	No.485F	2SC2314
		NPN Epitaxial Planar Silicon Transistor
27MHz CB Transceiver Driver Applications		

Absolute Maximum Ratings at Ta = 25°C

				unit
Collector-to-Base Voltage	V _{CB0}	R _{BE} = 150Ω	75	V
Collector-to-Emitter Voltage	V _{CER}		75	V
Collector-to-Emitter Voltage	V _{CEO}		45	V
Emitter-to-Base Voltage	V _{EBO}		5	V
Collector Current	I _C		1.0	A
	I _{CP}		1.5	A
Collector Dissipation	P _C		750	mW
		T _c = 25°C	5	W
Junction Temperature	T _j		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

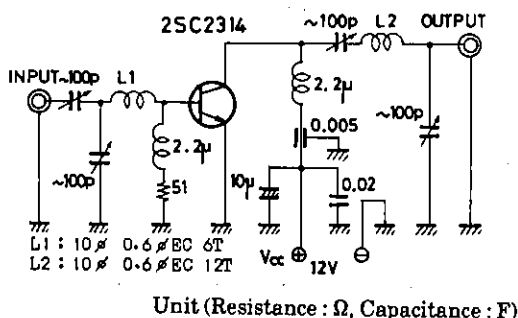
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Collector Cutoff Current	I _{CBO}	V _{CB} = 40V, I _E = 0			1.0	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} = 4V, I _C = 0			1.0	μA
C-B Breakdown Voltage	V _{(BR)CBO}	I _C = 10μA, I _E = 0	75			V
C-E Breakdown Voltage	V _{(BR)CER}	I _C = 1mA, R _{BE} = 150Ω	75			V
C-E Breakdown Voltage	V _{(BR)CEO}	I _C = 1mA, R _{BE} = ∞	45			V
E-B Breakdown Voltage	V _{(BR)EBO}	I _E = 10μA, I _C = 0	5			V
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			%
C-E Saturation Voltage	V _{CE(sat)}	I _C = 500mA, I _B = 50mA		0.2	0.6	V
B-E Saturation Voltage	V _{BE(sat)}	I _C = 500mA, I _B = 50mA		0.9	1.2	V

※ : The 2SC2314 is classified by 500mA h_{FE} as follows :

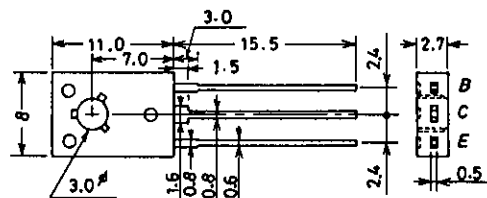
60 D 120	100 E 200	160 F 320
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Collector Efficiency Test Circuit



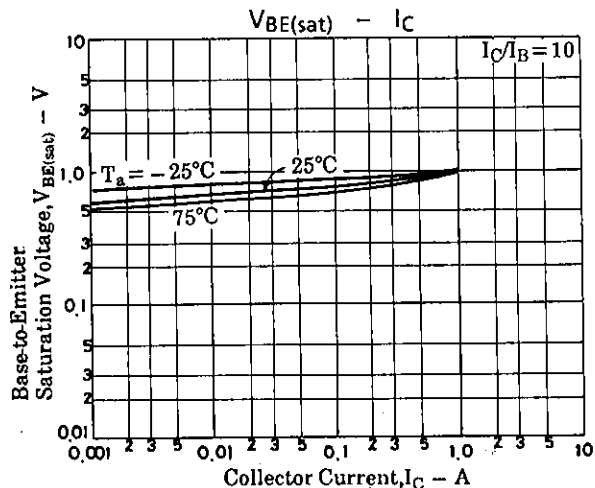
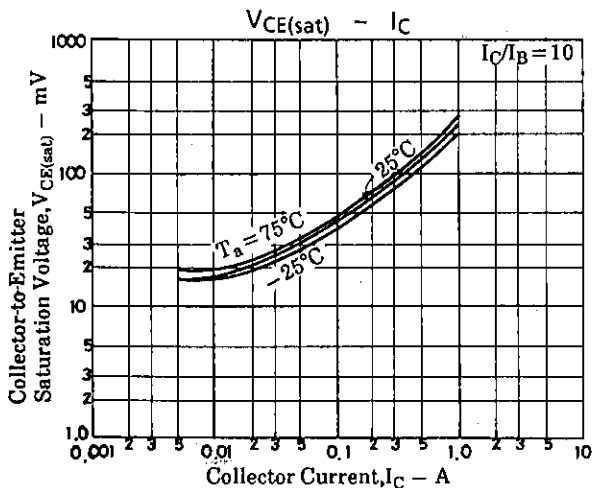
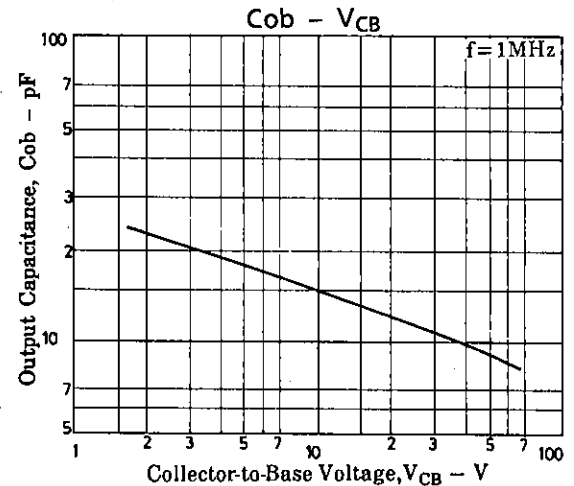
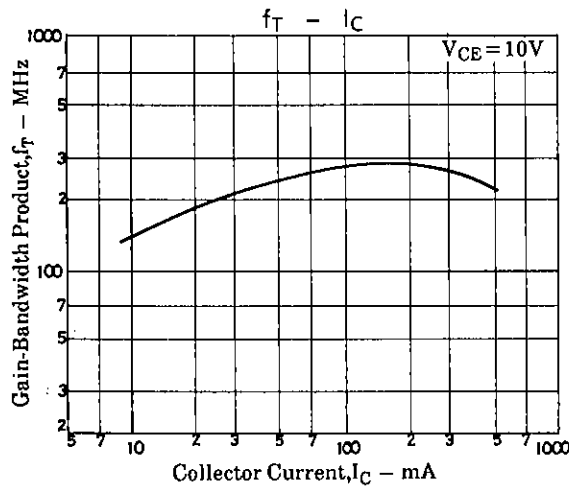
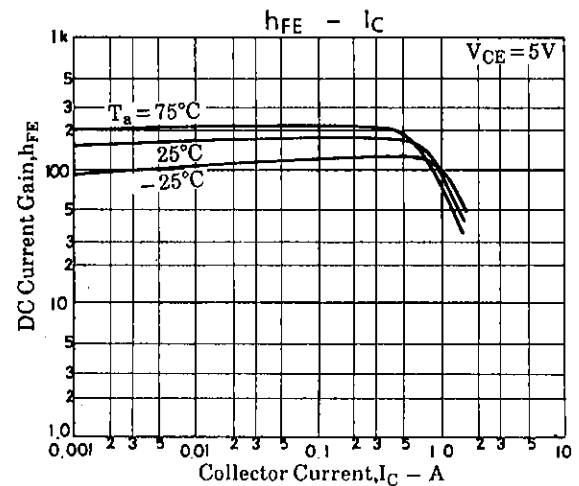
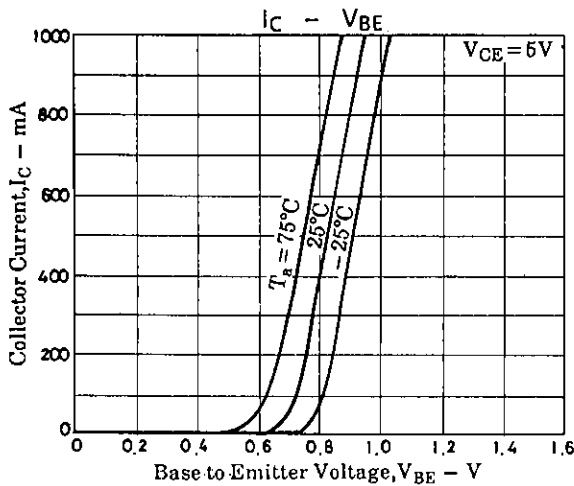
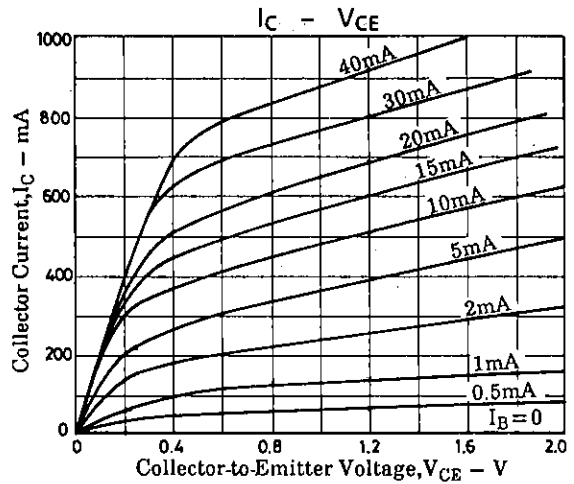
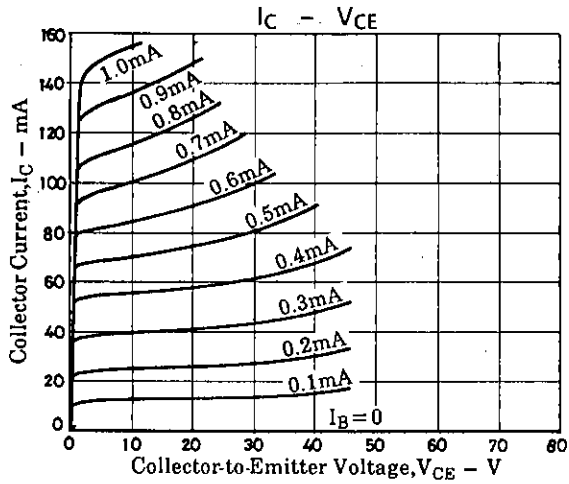
Package Dimensions 2009A

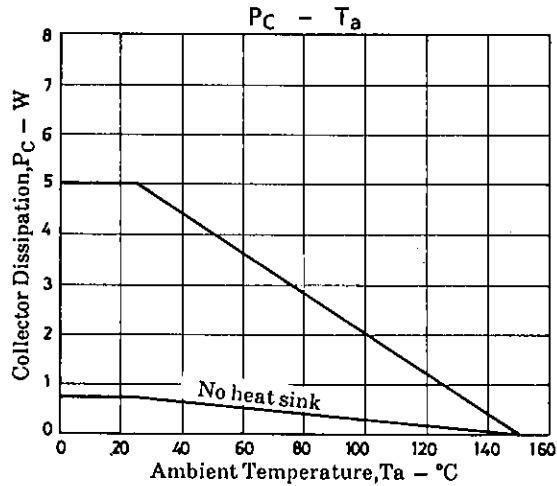
(unit : mm)



JEDEC: TO-126

B: Base
C: Collector
E: Emitter





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