

<b>SANYO</b>	No.544G	<b>2SA1011/2SC2344</b>
PNP/NPN Epitaxial Planar Silicon Transistors High-Voltage Switching, AF Power Amp, 100W Output Predriver Applications		

( ) : 2SA1011

**Maximum Ratings at Ta=25°C**

			unit
Collector-to-Base Voltage	V <sub>CB0</sub>	(-) 180	V
Collector-to-Emitter Voltage	V <sub>CEO</sub>	(-) 160	V
Emitter-to-Base Voltage	V <sub>EBO</sub>	(-) 6	V
Collector Current	I <sub>C</sub>	(-) 1.5	A
Collector Current (Pulse)	I <sub>CP</sub>	(-) 3	A
Collector Dissipation	P <sub>C</sub>	25	W
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	- 55 to + 150	°C

Tc=25°C

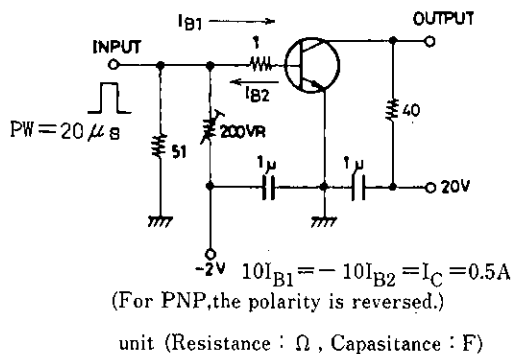
**Electrical Characteristics at Ta=25°C**

			min	typ	max	unit
Collector Cutoff Current	I <sub>CBO</sub>	V <sub>CB</sub> = (-) 120V, I <sub>E</sub> = 0			(-) 10	μA
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> = (-) 4V, I <sub>C</sub> = 0			(-) 10	μA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> = (-) 5V, I <sub>C</sub> = (-) 300mA	60 ※		200 ※	
Gain-Bandwidth Product	f <sub>T</sub>	V <sub>CE</sub> = (-) 10V, I <sub>C</sub> = (-) 50mA		100		MHz
Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> = (-) 10V, f = 1MHz		(30)		pF
				23		pF
Base-to-Emitter Voltage	V <sub>BE</sub>	V <sub>CE</sub> = (-) 5V, I <sub>C</sub> = (-) 10mA		(-) 1.5		V
C-E Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = (-) 500mA, I <sub>B</sub> = (-) 50mA		(- 0.5)		V
				0.3		V
C-B Breakdown Voltage	V <sub>(BR) CBO</sub>	I <sub>C</sub> = (-) 1mA, I <sub>E</sub> = 0		(-) 180		V
C-E Breakdown Voltage	V <sub>(BR) CEO</sub>	I <sub>C</sub> = (-) 1mA, I <sub>BE</sub> = ∞		(-) 160		V
E-B Breakdown Voltage	V <sub>(BR) EBO</sub>	I <sub>E</sub> = (-) 1mA, I <sub>C</sub> = 0		(-) 6		V
Turn-ON Time	t <sub>on</sub>	See specified Test Circuit.	(0.29)	0.15		μs
Fall Time	t <sub>f</sub>	"	(0.19)	0.48		μs
Storage Time	t <sub>stg</sub>	"	(0.48)	0.81		μs

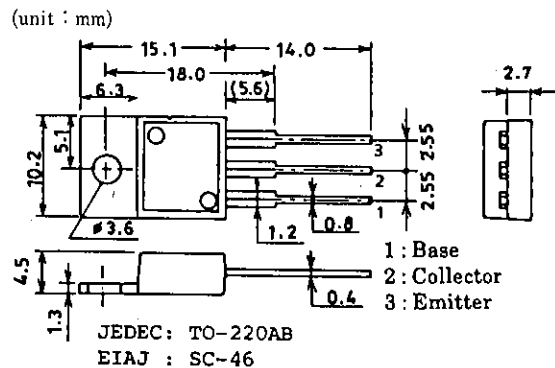
※ The 2SA1011/2SC2344 are classified by 300mA h<sub>FE</sub> as follows :

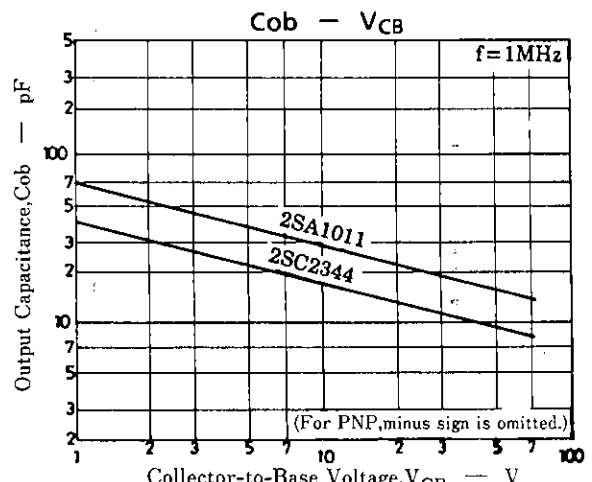
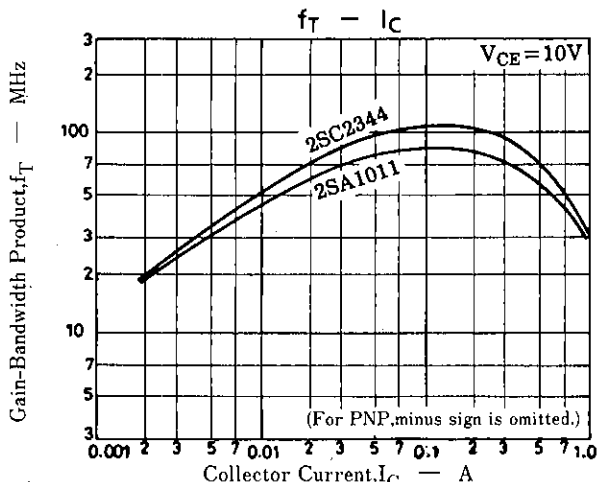
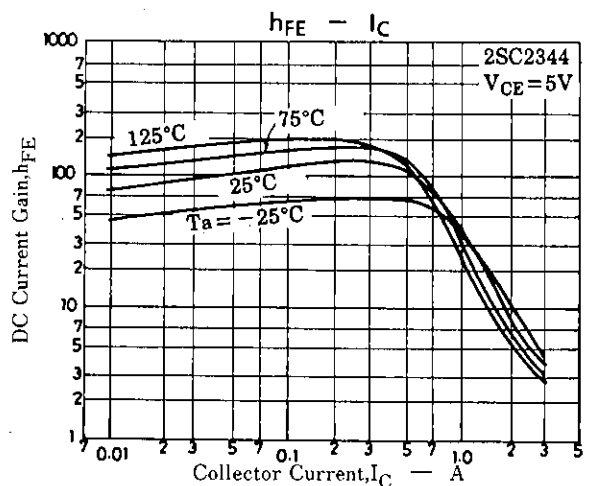
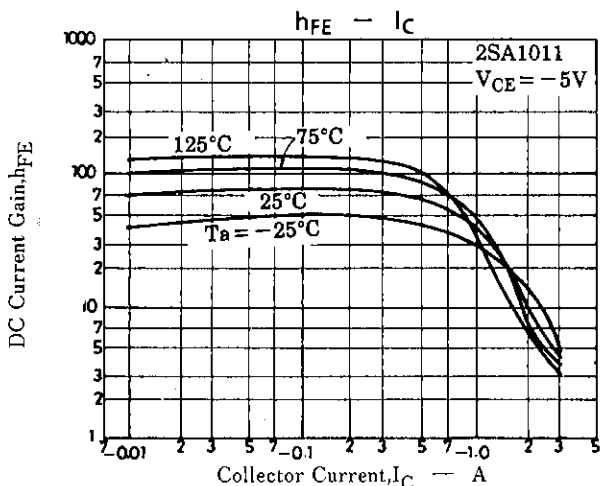
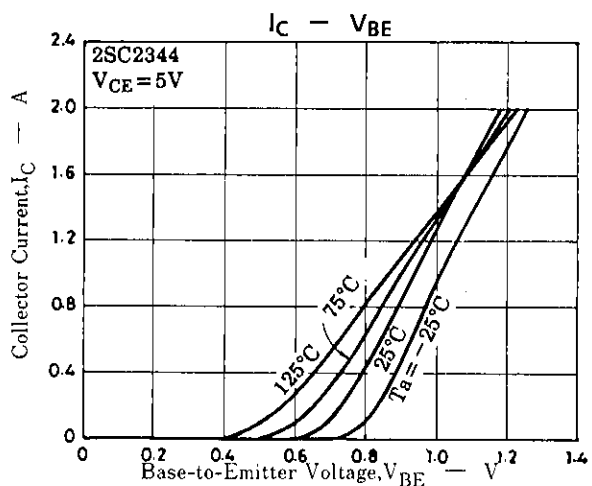
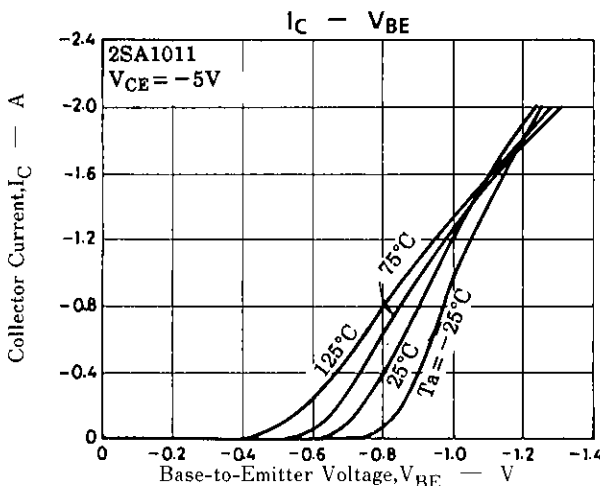
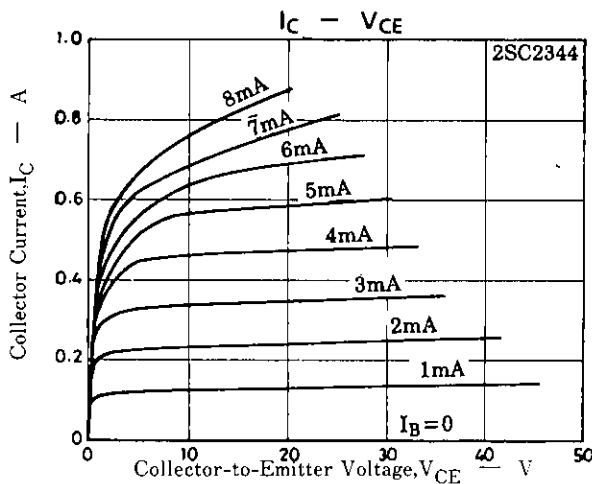
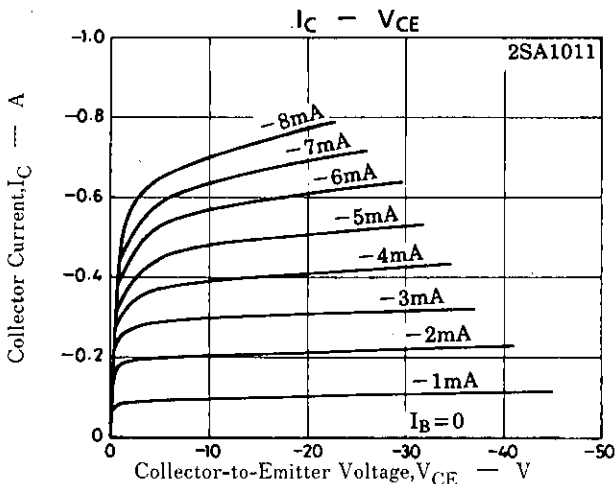
60	D	120	100	E	200
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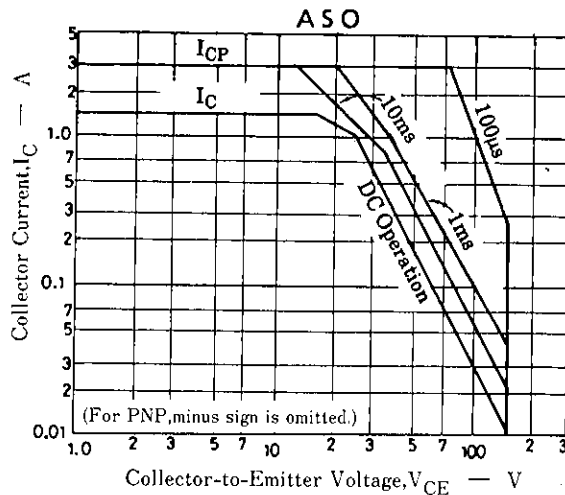
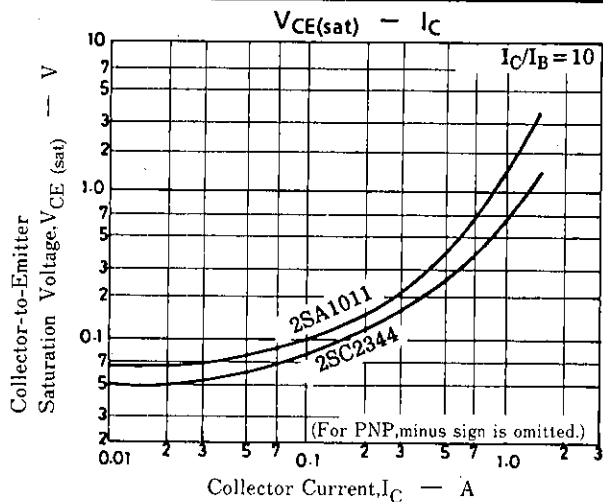
**Switching Time Test Circuit**



**Package Dimensions 2010C**







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