

**2SD1111****Driver Applications****Applications**

- Motor drivers, printer hammer drivers, relay drivers, voltage regulator control.

Features

- High DC Current Gain (5000 or greater).
- Large current capacity and wide ASO.
- Low saturation voltage ($V_{CE(sat)}=0.8V$ typ).

Specifications**Absolute Maximum Ratings at $T_a = 25^\circ C$**

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		80	V
Collector-to-Emitter Voltage	V_{CEO}		50	V
Emitter-to-Base Voltage	V_{EBO}		10	V
Collector Current	I_C		0.7	A
Collector Current (Pulse)	I_{CP}		2	A
Collector Dissipation	P_C		600	mW
Junction Temperature	T_J		150	$^\circ C$
Storage Temperature	T_{stg}		-55 to +150	$^\circ C$

Electrical Characteristics at $T_a = 25^\circ C$

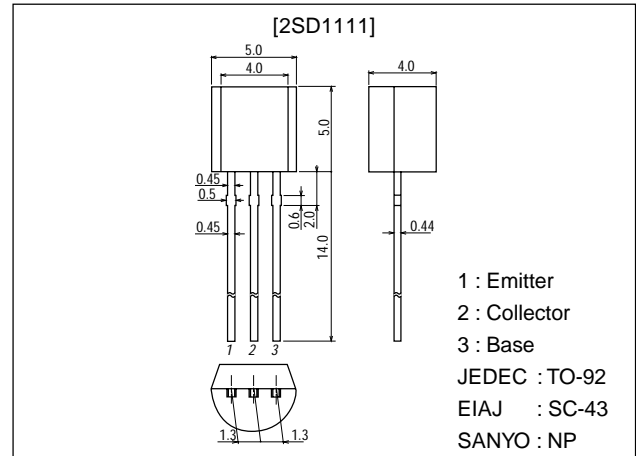
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB}=40V, I_E=0$			0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=8V, I_C=0$			0.1	μA
DC Current Gain	h_{FE1}	$V_{CE}=2V, I_C=50mA$	5000			
	h_{FE2}	$V_{CE}=2V, I_C=500mA$	4000			
Gain-Bandwidth Product	f_T	$V_{CE}=5V, I_C=50mA$		200		MHz
Output Capacitance	C_{ob}	$V_{CB}=10V, f=1MHz$		10		pF

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Package Dimensions

unit:mm

2003B



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■ 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.

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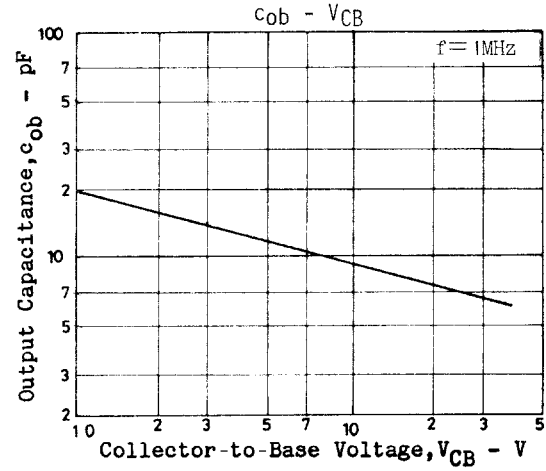
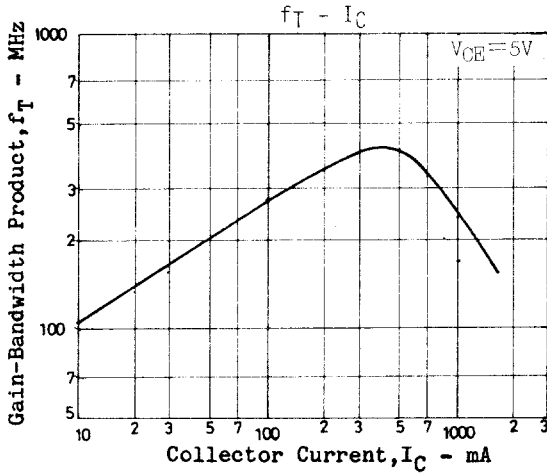
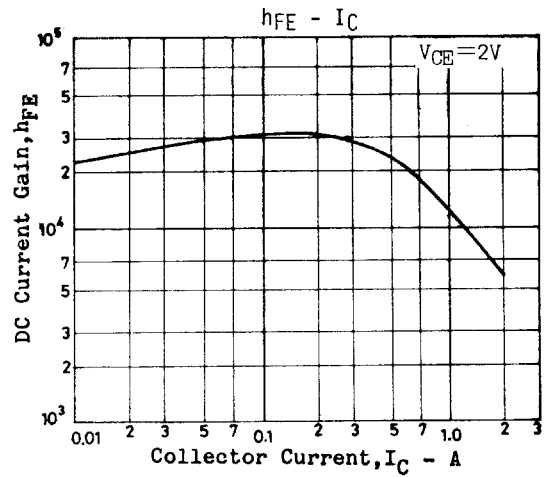
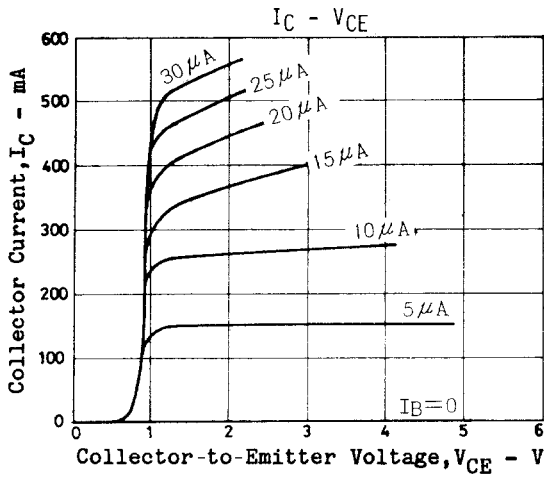
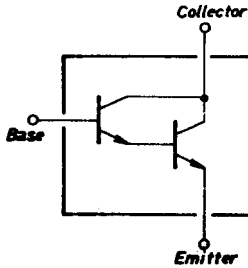
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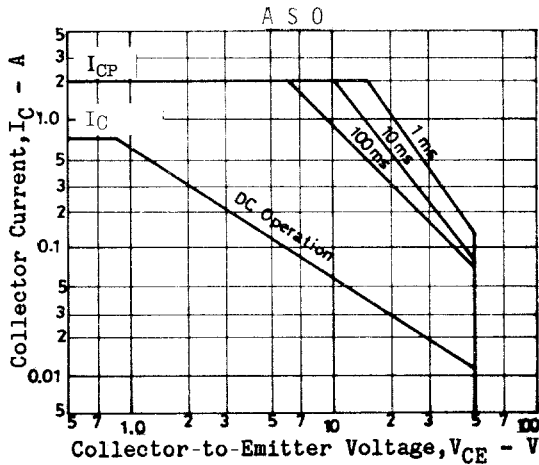
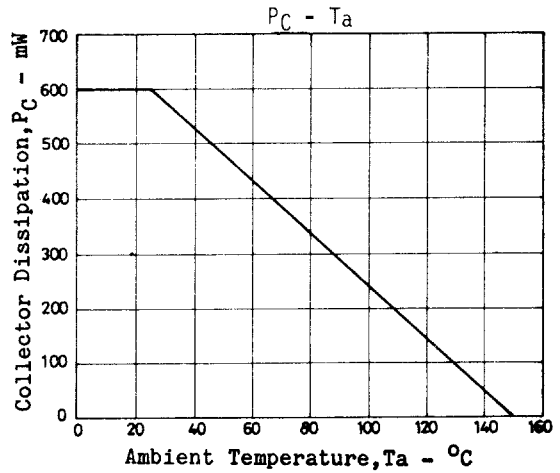
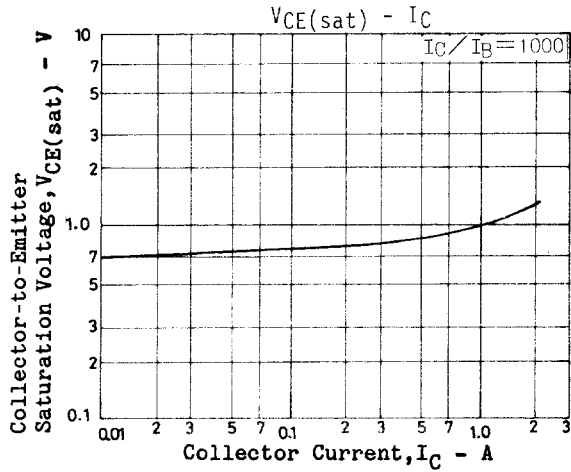
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=0.1mA$		0.8	1.2	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=100mA, I_B=0.1mA$		1.3	2.0	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	80			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, R_{BE}=\infty$	50			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	10			V

Electrical Connection



2SD1111



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