

**2SB888****Driver Applications****Applications**

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

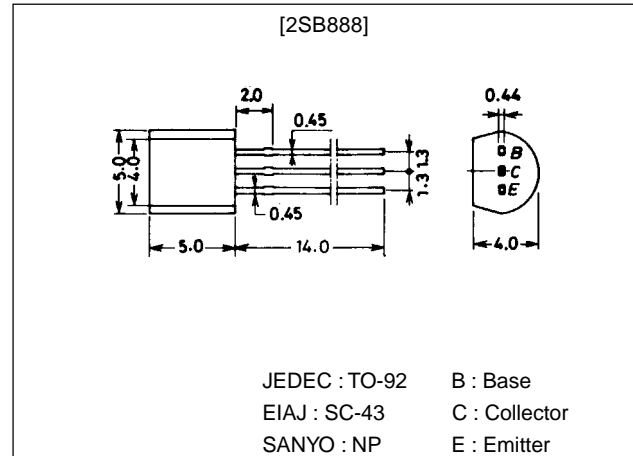
Features

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

Package Dimensions

unit:mm

2003A

**Specifications****Absolute Maximum Ratings at Ta = 25°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
Allowable Collector Dissipation	P_C		600	mW
Junction Temperature	T_J		150	°C
Storage Temperature	T_{stg}		-55 to +150	°C

Electrical Characteristics at Ta = 25°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}	$V_{CE} = -2V, I_C = -500mA$	3000			
Gain-Bandwidth Product	f_T	$V_{CE} = -5V, I_C = -50mA$		170		MHz
Output Capacitance	C_{ob}	$V_{CB} = -10V, f = 1MHz$		16		pF

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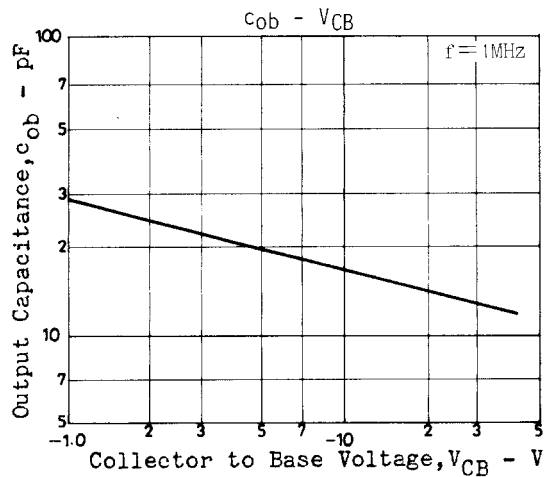
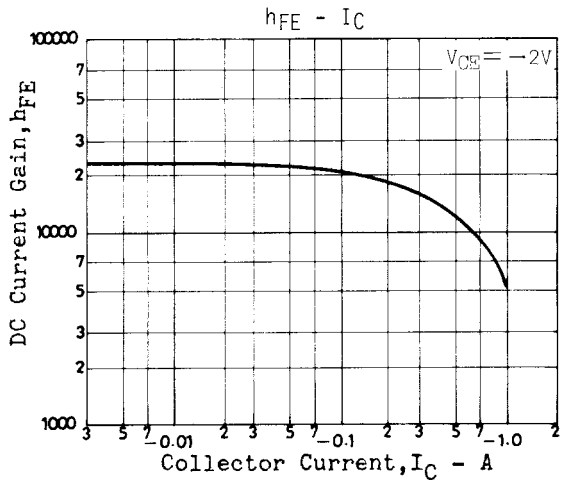
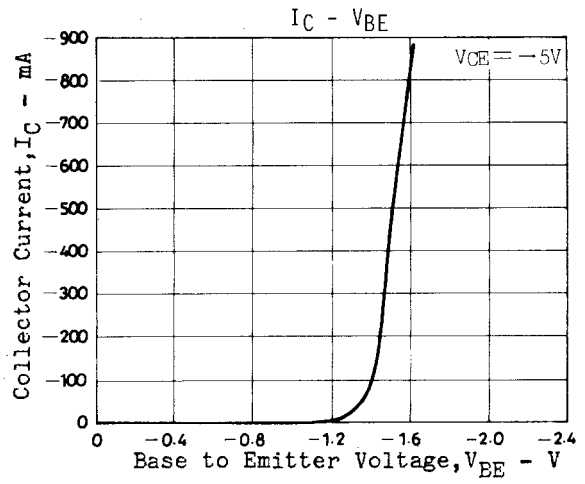
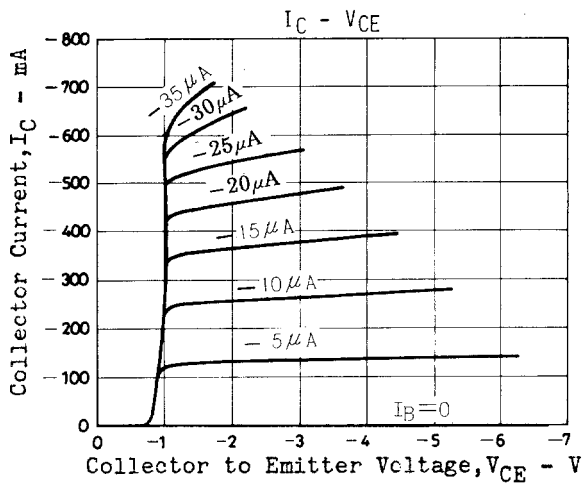
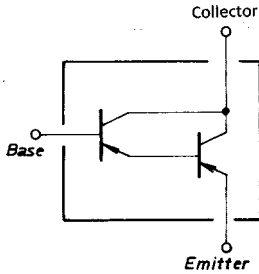
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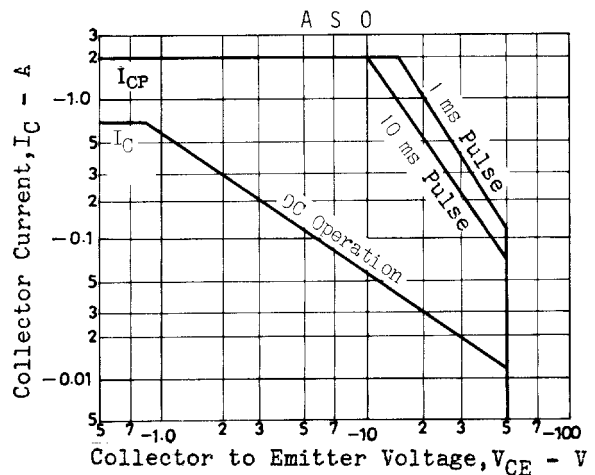
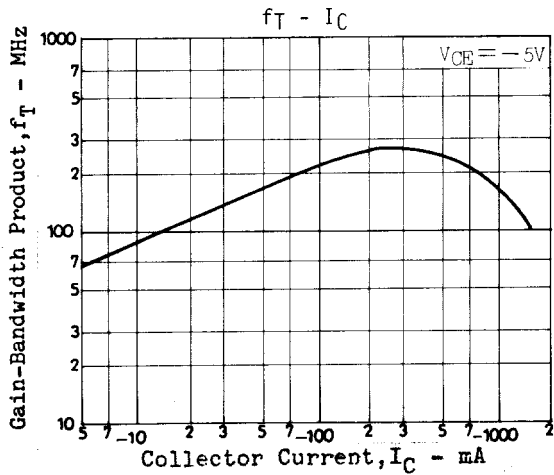
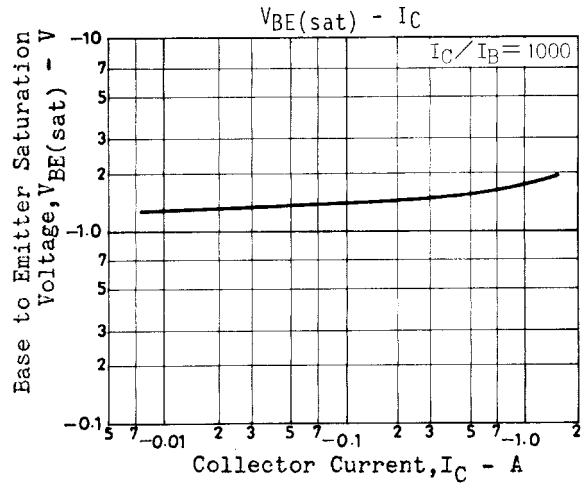
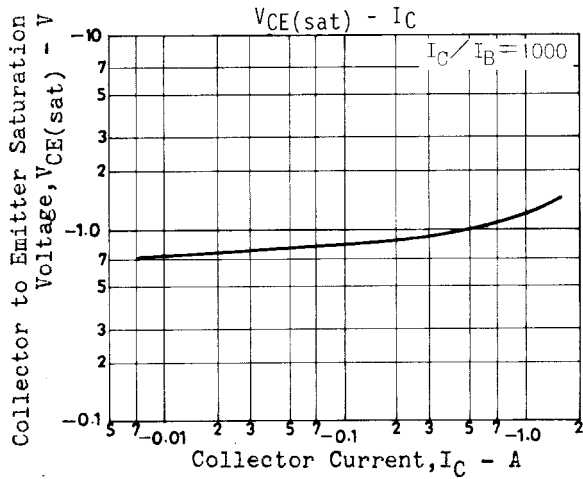
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2SB888

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

Electrical Connection





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