



## 2SB887/2SD1197

### Driver Applications

#### Features

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

#### Features

- High DC current gain.
- Large current capacity and wide ASO.
- Low saturation voltage.

( ) : 2SB887

#### Specifications

##### Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	$V_{CB0}$		(-110)	V
Collector-to-Emitter Voltage	$V_{CEO}$		(-100)	V
Emitter-to-Base Voltage	$V_{EBO}$		(-6)	V
Collector Current	$I_C$		(-10)	A
Collector Current (Pulse)	$I_{CP}$		(-15)	A
Collector Dissipation	$P_C$	$T_c=25^\circ\text{C}$	70	W
Junction Temperature	$T_J$		150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-55 to +150	$^\circ\text{C}$

##### Electrical Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = (-)80\text{V}, I_E = 0$			(-0.1)	mA
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = (-)5\text{V}, I_C = 0$			(-3.0)	mA
DC Current Gain	$h_{FE}$	$V_{CE} = (-)3\text{V}, I_C = (-)5\text{A}$	1500	4000		
Gain-Bandwidth Product	$f_T$	$V_{CE} = (-)5\text{V}, I_C = (-)5\text{A}$		20		MHz
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = (-)5\text{A}, I_B = (-)10\text{mA}$		(-1.0)	(-1.5)	V
				0.9		V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = (-)5\text{A}, I_B = (-)10\text{mA}$			(-2.0)	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = (-)5\text{mA}, I_E = 0$	(-110)			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-)50\text{mA}, R_{BE} = \infty$	(-100)			V

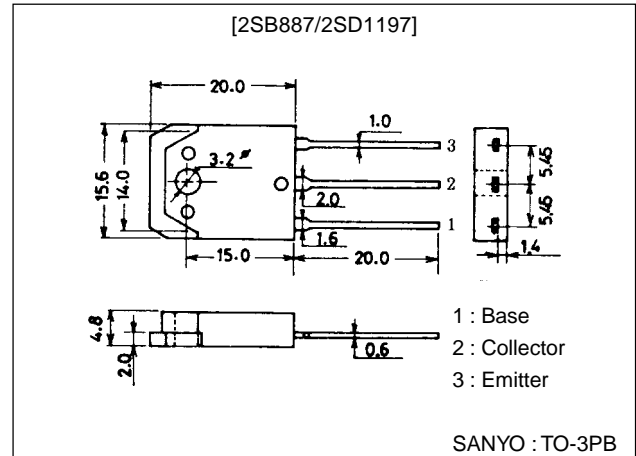
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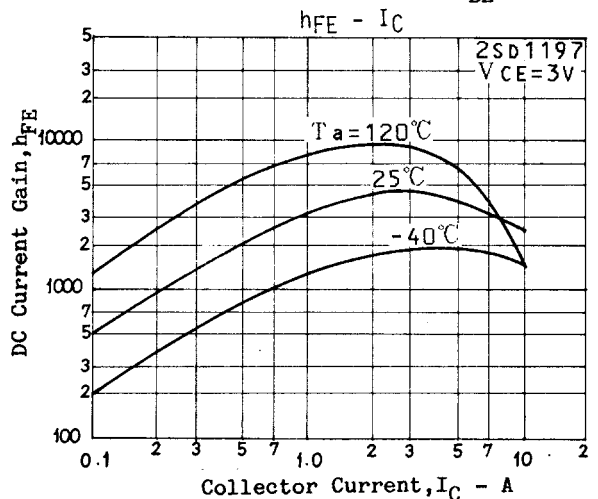
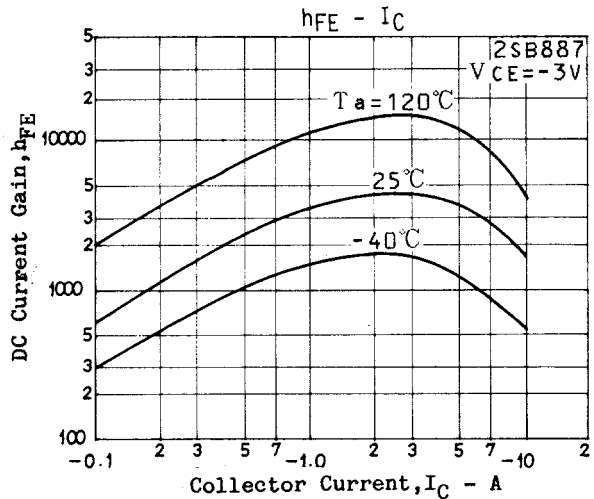
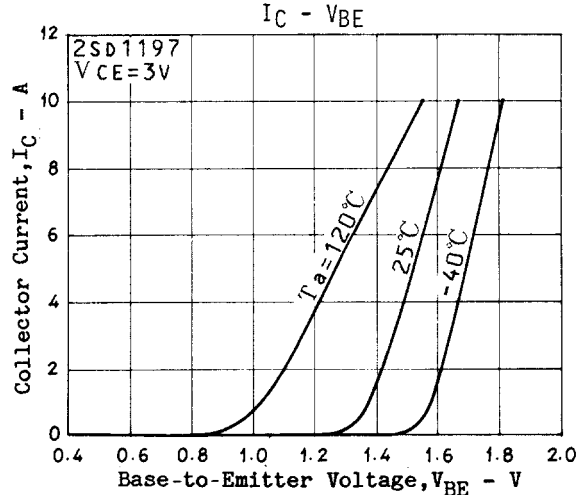
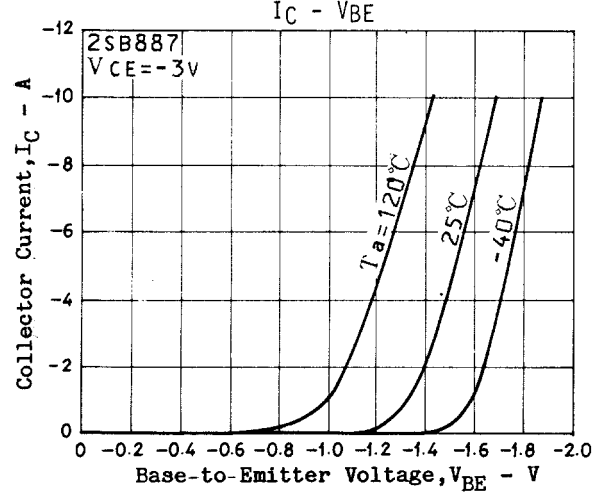
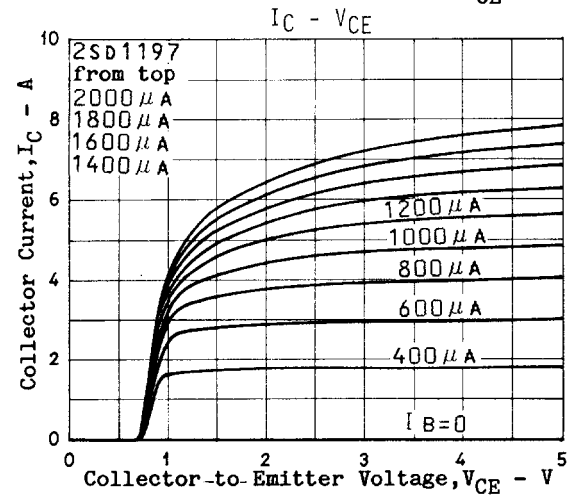
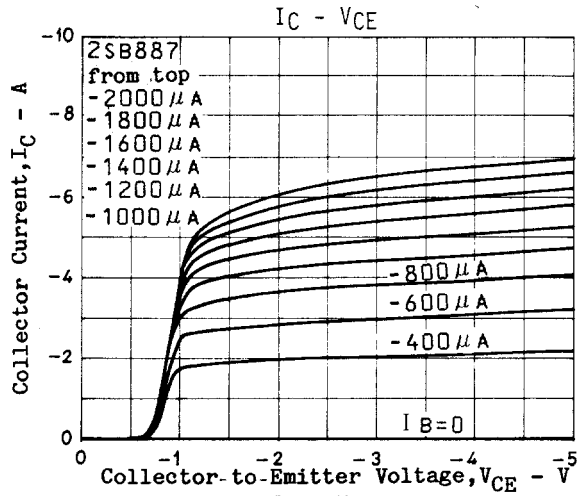
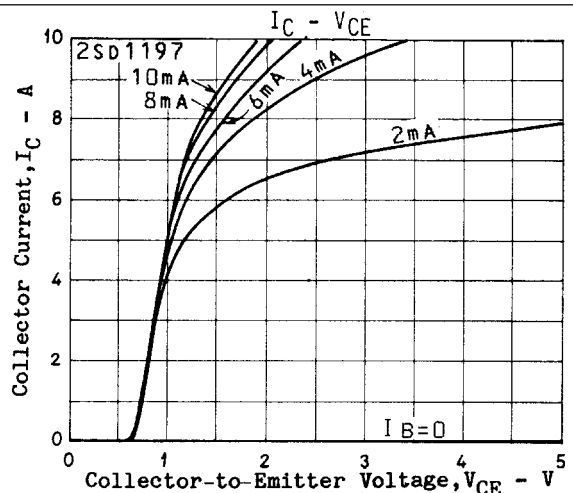
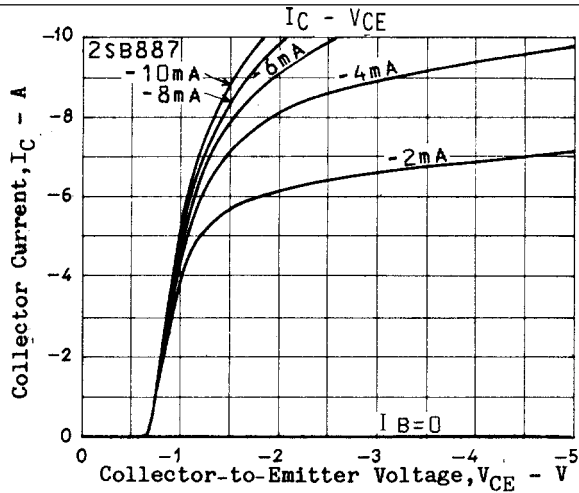
#### Package Dimensions

unit:mm

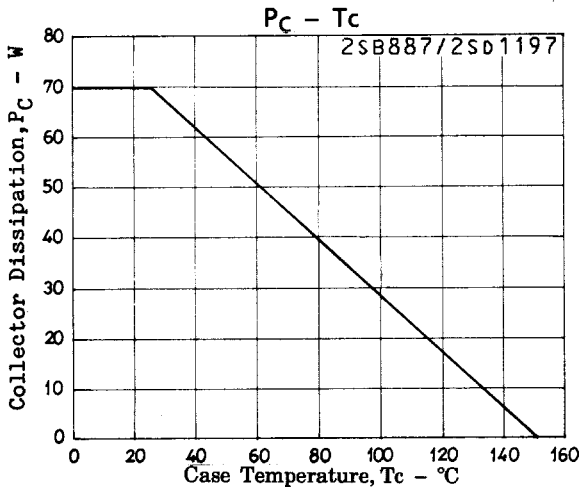
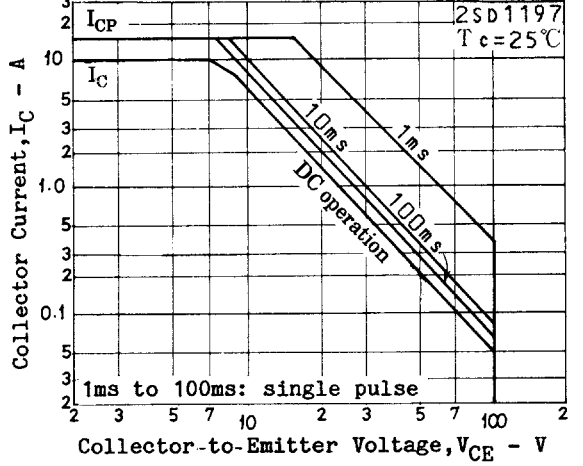
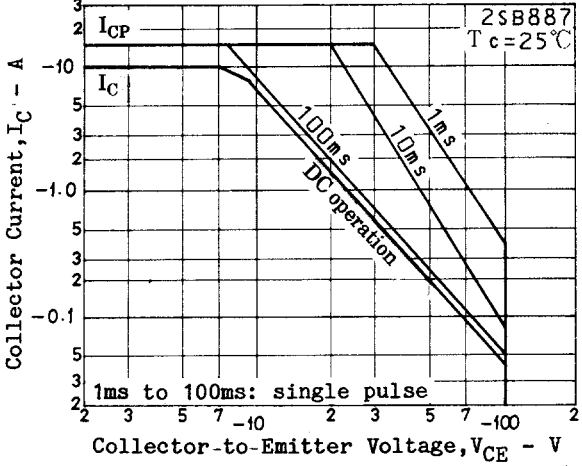
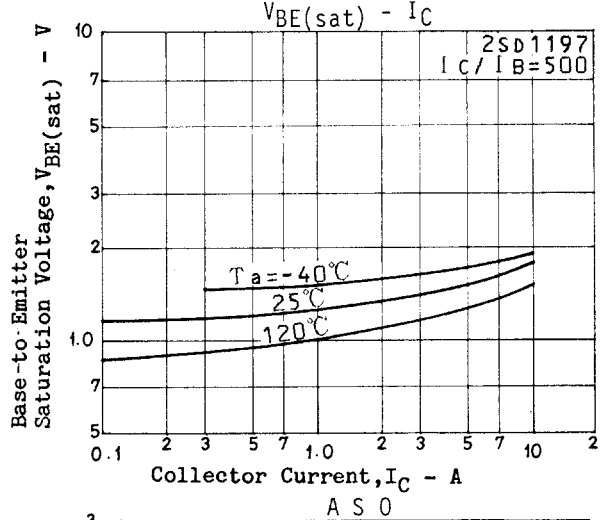
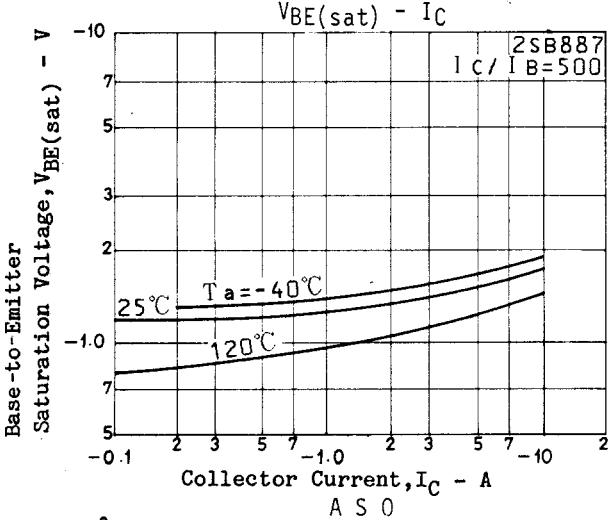
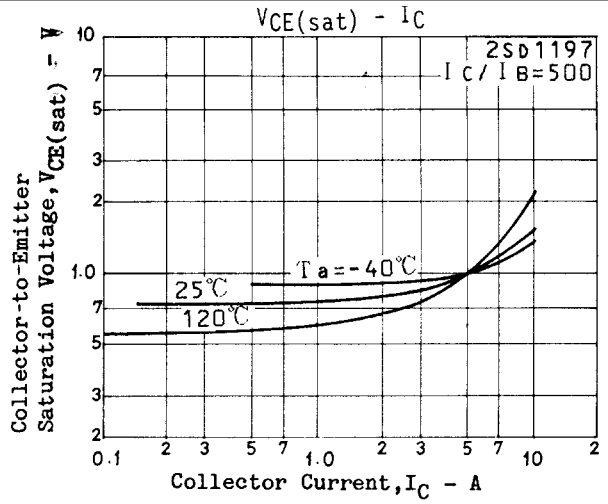
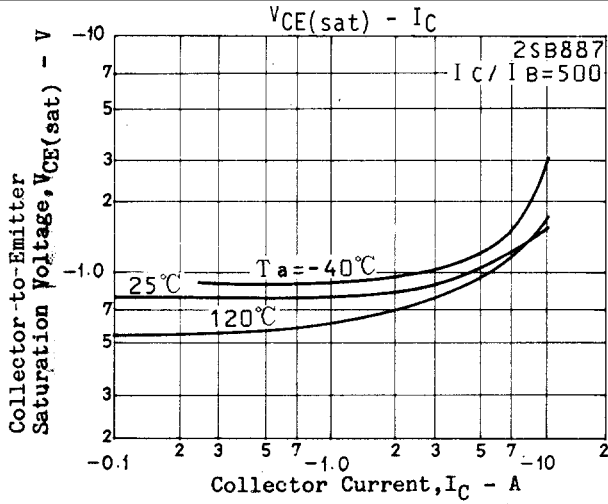
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2SB887/2SD1197



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