

<b>SANYO</b>	No.1036B	<b>2SB883/2SD1193</b>
	PNP/NPN Epitaxial Planar Silicon Darlington Transistors	
<b>Driver Applications</b>		

**Applications**

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

**Features**

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

( ) : 2SB883

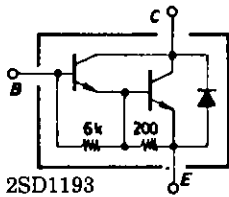
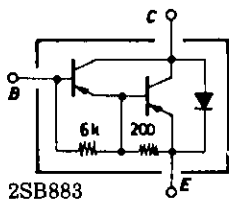
**Absolute Maximum Ratings at Ta = 25°C**

Collector-to-Base Voltage	$V_{CB0}$		(-)70	V	unit
Collector-to-Emitter Voltage	$V_{CEO}$		(-)60	V	
Emitter-to-Base Voltage	$V_{EBO}$		(-)6	V	
Collector Current	$I_C$		(-)15	A	
Collector Current (Pulse)	$I_{CP}$		(-)20	A	
Collector Dissipation	$P_C$	$T_c = 25^\circ C$	70	W	
Junction Temperature	$T_j$		150	°C	
Storage Temperature	$T_{stg}$		-55 to +150	°C	

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

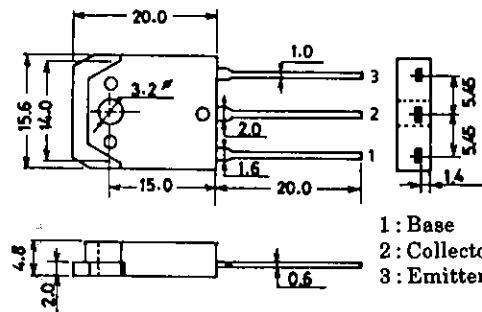
			min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = (-)40V, I_E = 0$			(-)0.1	mA
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = (-)5V, I_C = 0$			(-)3	mA
DC Current Gain	$h_{FE}$	$V_{CE} = (-)2V, I_C = (-)7A$	2000	5000		
Gain Bandwidth Product	$f_T$	$V_{CE} = (-)5V, I_C = (-)7A$		20		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = (-)7A, I_B = (-)14mA$		0.9(-)1.5		V
				(-1.0)		
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = (-)7A, I_B = (-)14mA$			(-)2.0	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = (-)5mA, I_E = 0$	(-)70			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-)50mA, R_{BE} = \infty$	(-)60			V

**Electrical Connection**



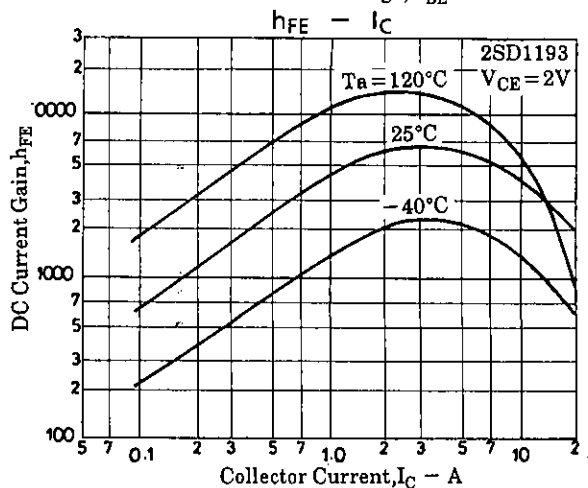
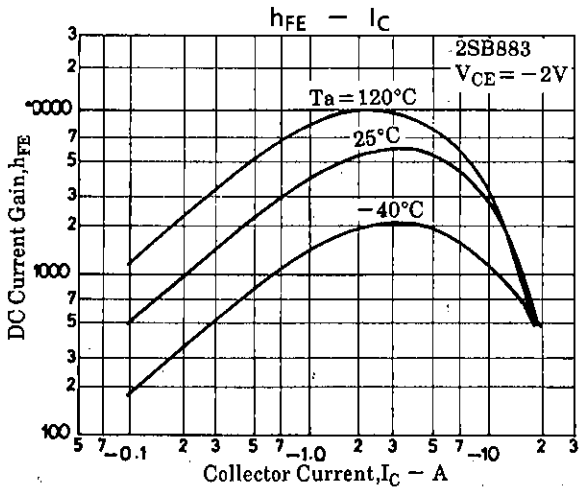
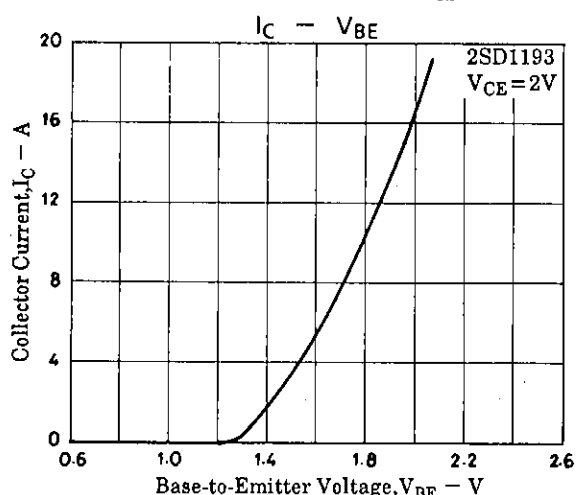
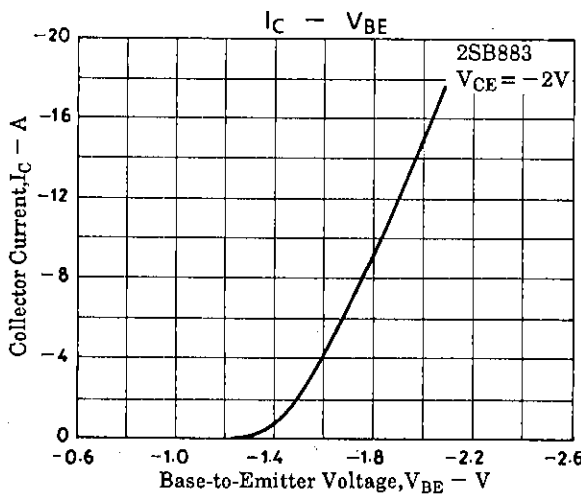
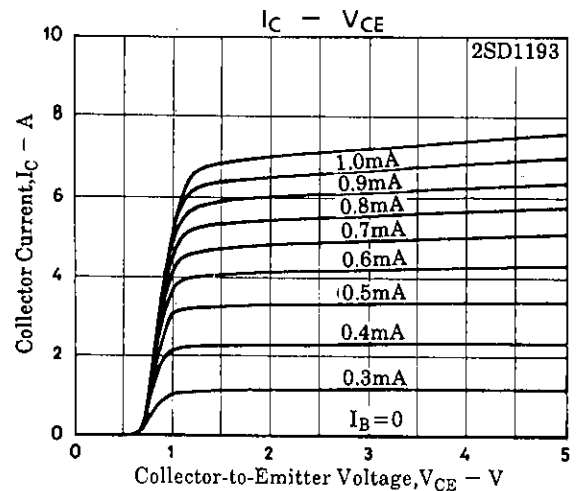
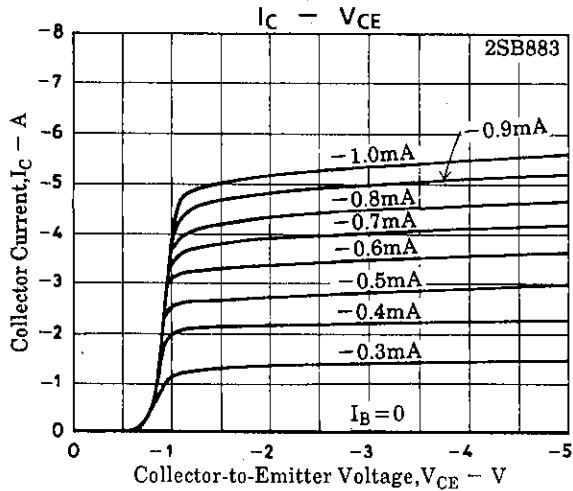
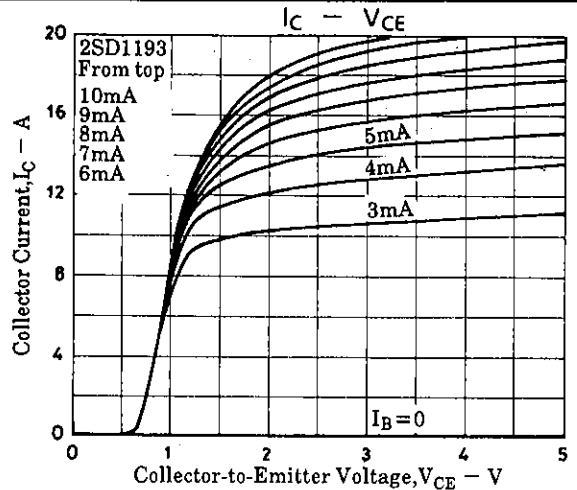
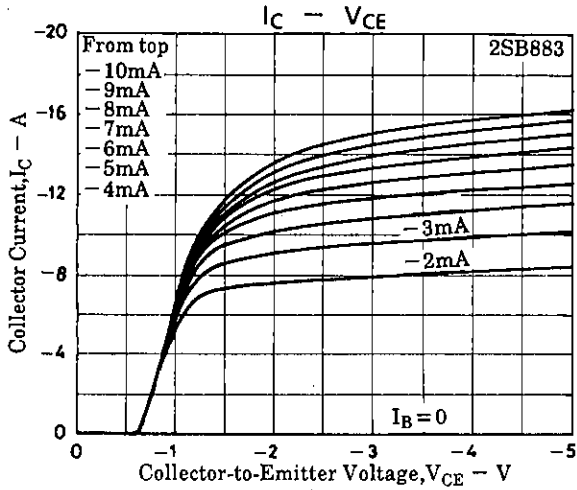
Unit (Resistance :  $\Omega$ )

**Package Dimensions 2022A**  
(unit : mm)

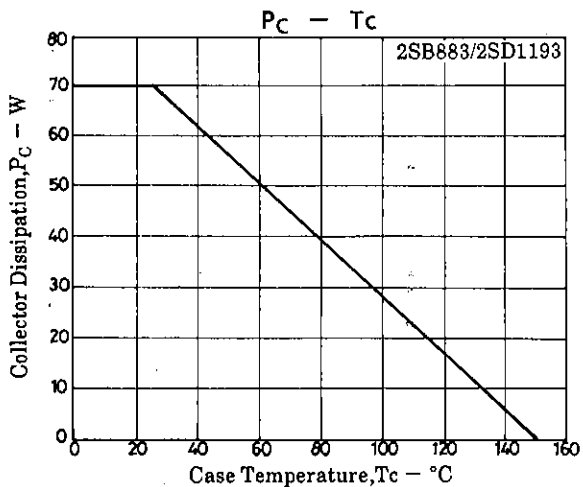
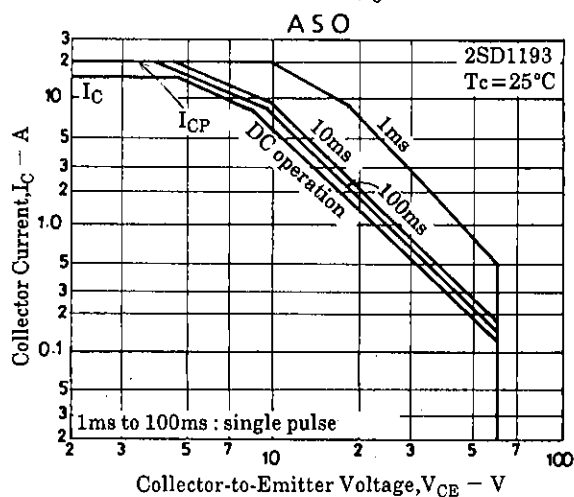
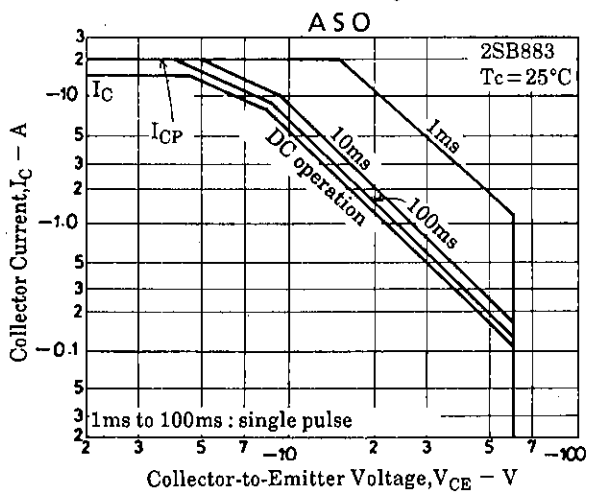
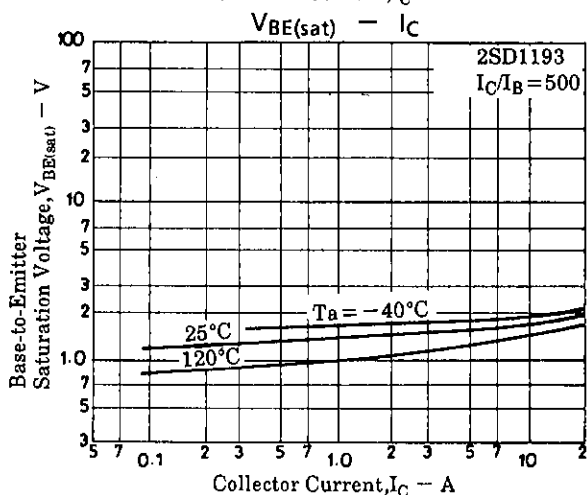
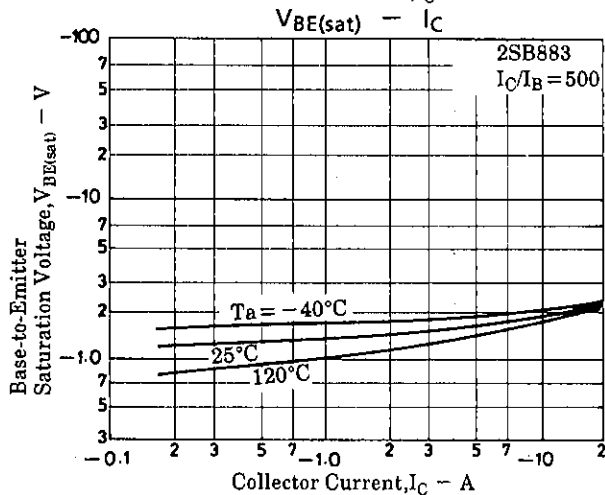
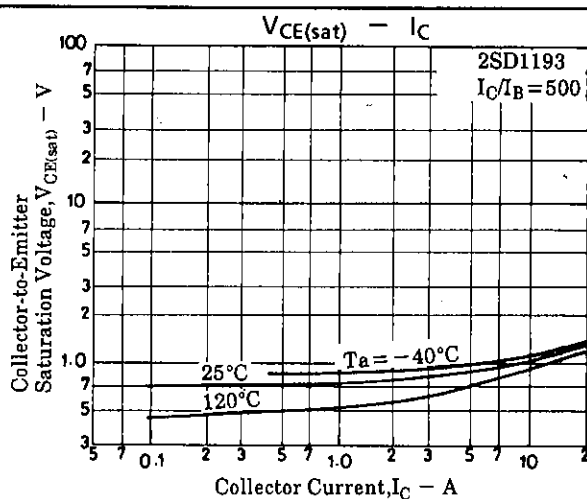
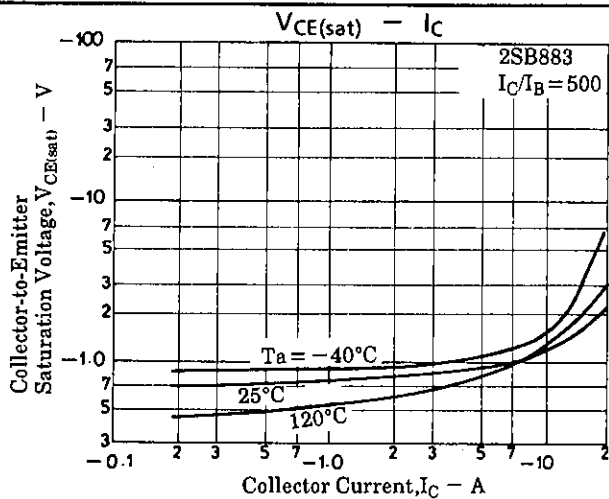


1 : Base  
2 : Collector  
3 : Emitter

SANYO : TO3PB



2SB883/2SD1193



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