

SANYO	No.1245C	2SB986/2SD1348
	PNP/NPN Epitaxial Planar Silicon Darlington Transistors	
50V/4A Switching Applications		

Applications

- Power supplies, relay drivers, lamp drivers, electrical equipment.

Features

- Adoption of FBET and MBIT processes.
- Low saturation voltage.
- High current capacity and wide ASO.

() : 2SB986

Absolute Maximum Ratings at Ta = 25°C

			unit
Collector-to-Base Voltage	V _{CB0}	(-)60	V
Collector-to-Emitter Voltage	V _{CEO}	(-)50	V
Emitter-to-Base Voltage	V _{EBO}	(-)6	V
Collector Current	I _C	(-)4	A
Collector Current (Pulse)	I _{CP}	(-)6	A
Collector Dissipation	P _C	1.2	W
		10	W
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

T_c = 25°C

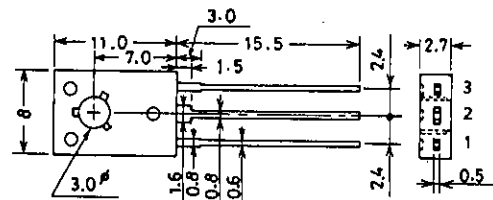
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Collector Cutoff Current	I _{CBO}	V _{CB} = (-)40V, I _E = 0			(-)1.0	mA
Emitter Cutoff Current	I _{EBO}	V _{EB} = (-)4V, I _C = 0			(-)1.0	mA
DC Current Gain	h _{FE} (1)	V _{CE} = (-)2V, I _C = (-)100mA	100※		560※	
	h _{FE} (2)	V _{CE} = (-)2V, I _C = (-)3A	40			
Gain Bandwidth Product	f _T	V _{CE} = (-)10V, I _C = (-)50mA		150		MHz
Output Capacitance	C _{ob}	V _{CB} = (-)10V		25		pF
				(39)		
C-E Saturation Voltage	V _{CE(sat)}	I _C = (-)2A, I _B = (-)100mA, Pulse		0.19	0.5	V
				(-0.35)	(-0.7)	
B-E Saturation Voltage	V _{BE(sat)}	I _C = (-)2A, I _B = (-)100mA, Pulse		(-)0.94	(-)1.2	V
C-B Breakdown Voltage	V _{(BR)CBO}	I _C = (-)10μA, I _E = 0	(-)60			V
C-E Breakdown Voltage	V _{(BR)CEO}	I _C = (-)1mA, R _{BE} = ∞	(-)50			V
E-B Breakdown Voltage	V _{(BR)EBO}	I _E = (-)10μA, I _C = 0	(-)6			V

※ : The 2SB986/2SD1348 are classified by 100mA h_{FE} as follows :

100	R	200	140	S	280	200	T	400	280	U	560
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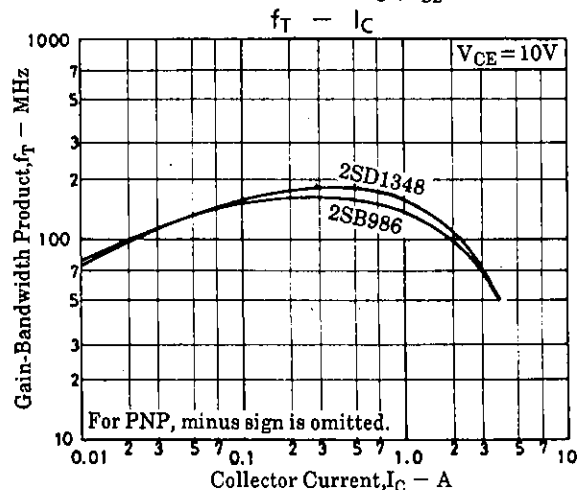
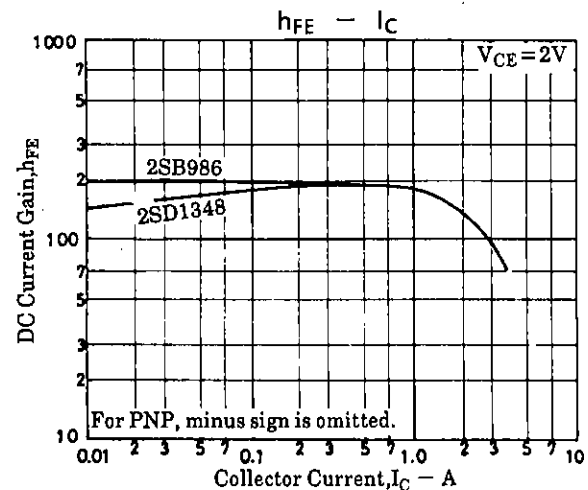
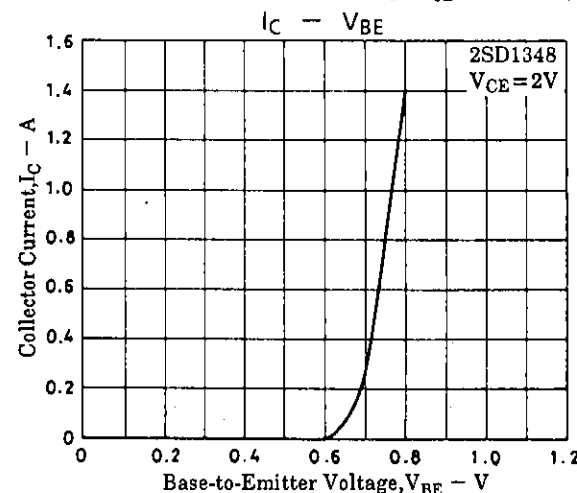
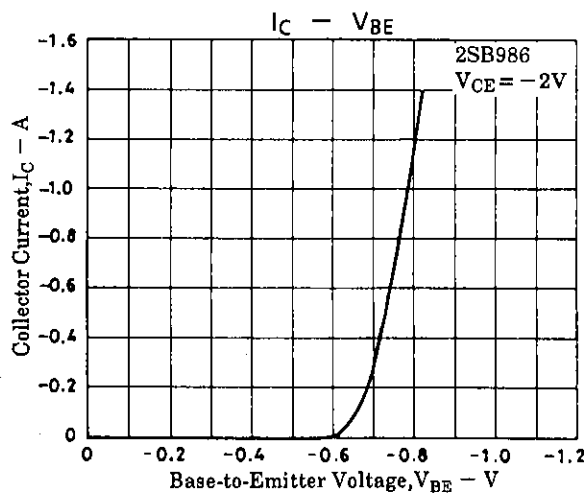
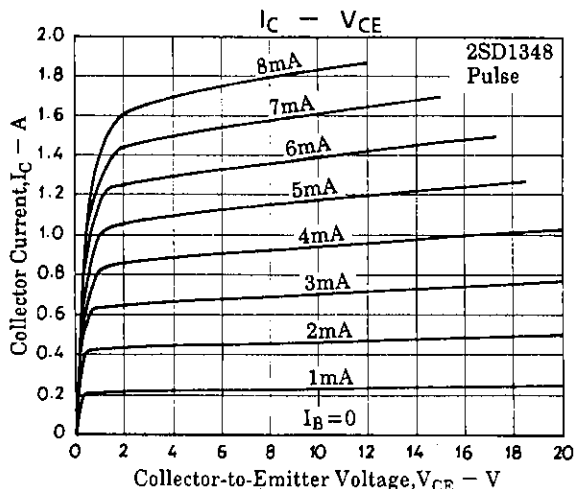
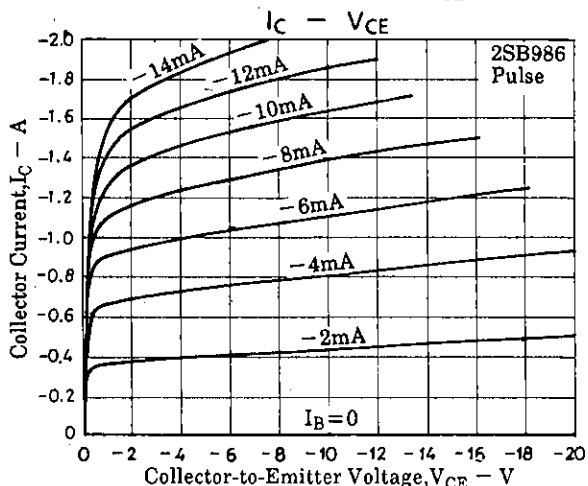
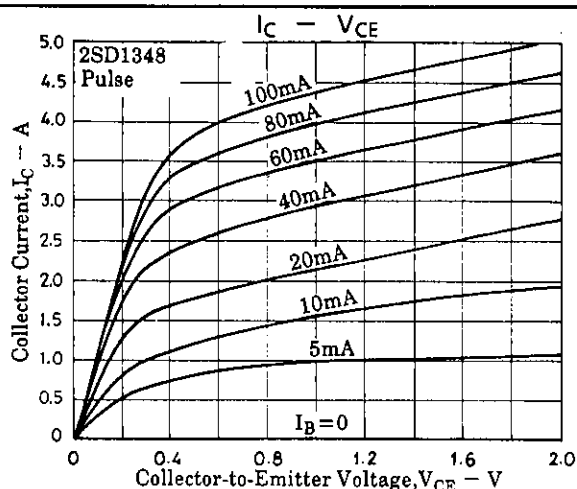
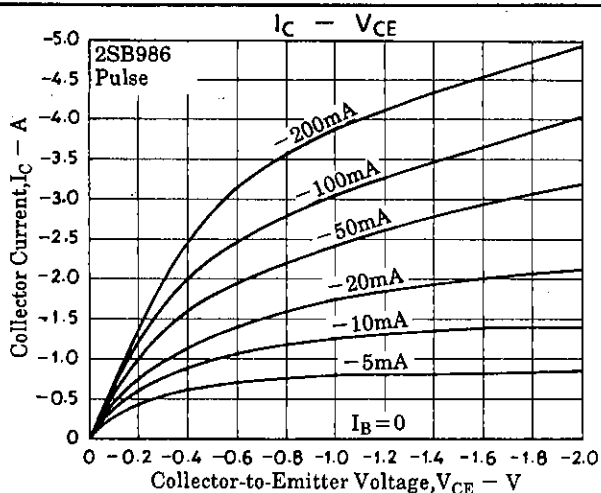
Package Dimensions 2009B
(unit : mm)



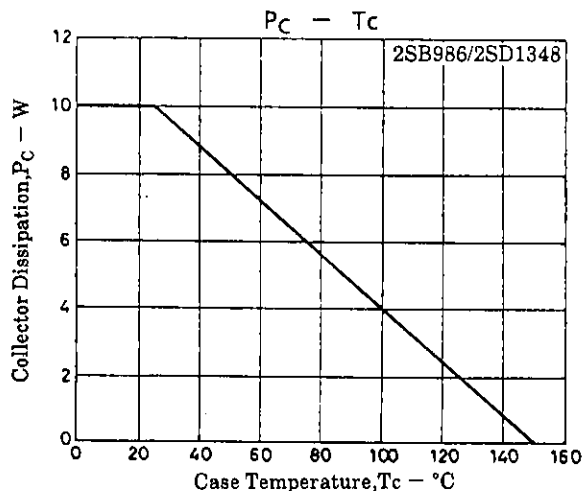
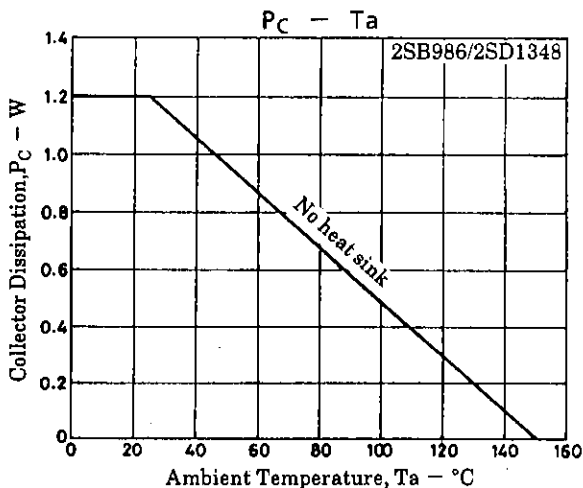
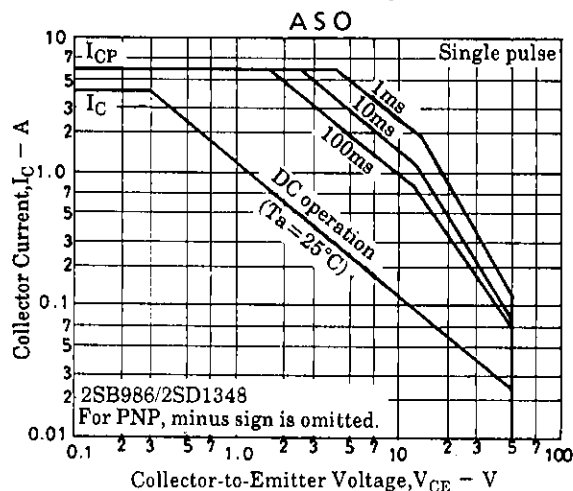
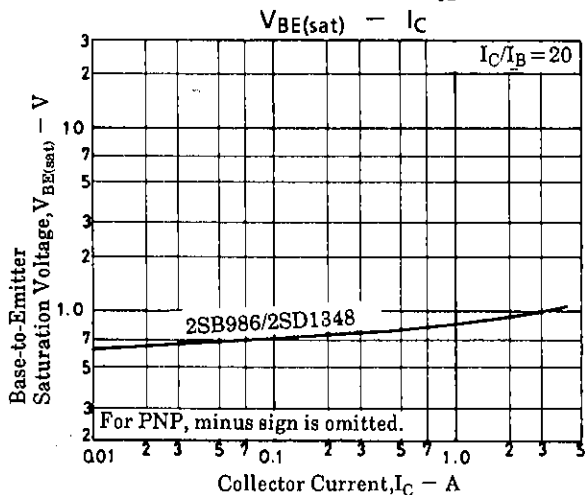
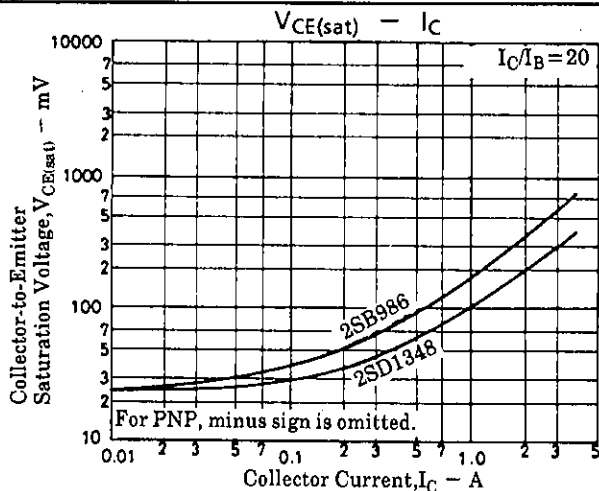
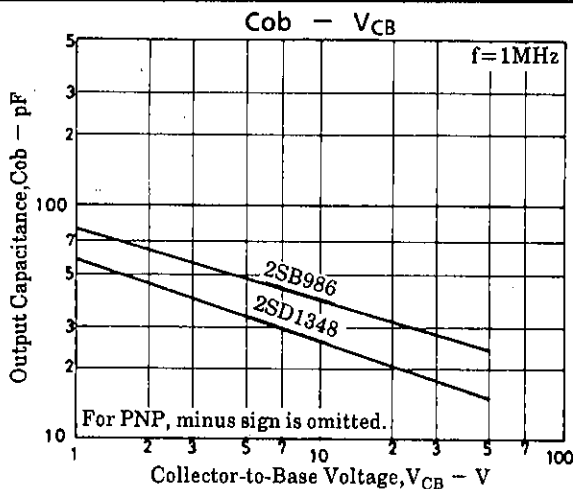
JEDEC: TO-126

- 1 : Emitter
- 2 : Collector
- 3 : Base

2SB986/2SD1348



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