

SANYO	No.2506	2SD1853
	NPN Epitaxial Planar Silicon Darlington Transistor	
Driver Applications		

Applications

Motor drivers, hammer drivers, relay drivers

Features

- . High DC current gain
- . Low saturation voltage

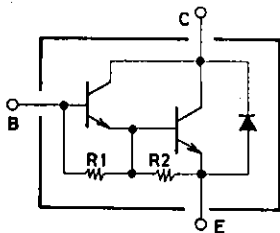
Absolute Maximum Ratings at Ta=25°C

			unit
Collector to Base Voltage	V _{CB0}	80	V
Collector to Emitter Voltage	V _{CEO}	60	V
Emitter to Base Voltage	V _{EBO}	6	V
Collector Current	I _C	1.5	A
Collector Current(Pulse)	I _{CP}	3	A
Collector Dissipation	P _C	0.7	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} =60V, I _E =0			10	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} =5V, I _C =0			2.5	mA
DC Current Gain	h _{FE} (1)	V _{CE} =2V, I _C =0.5A	1000			
	h _{FE} (2)	V _{CE} =2V, I _C =1A	2000			
C-E Saturation Voltage	V _{CE(sat)}	I _C =1A, I _B =2mA			1.5	V
B-E Saturation Voltage	V _{BE(sat)}	I _C =1A, I _B =2mA			2.0	V
C-B Breakdown Voltage	V _{(BR)CBO}	I _C =1mA, I _E =0	80			V
C-E Breakdown Voltage	V _{(BR)CEO}	I _C =25mA, R _{BE} =∞	60			V

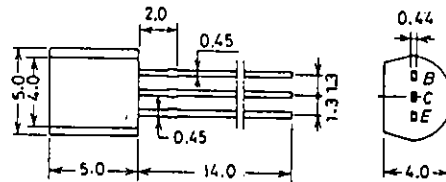
Electrical Connection



R1 ≅ 5kΩ
R2 ≅ 500Ω

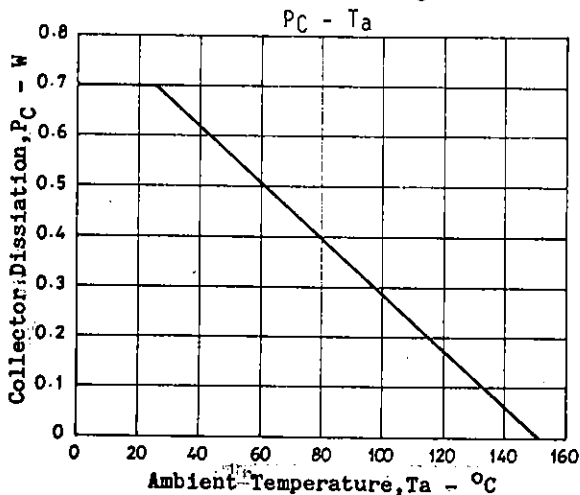
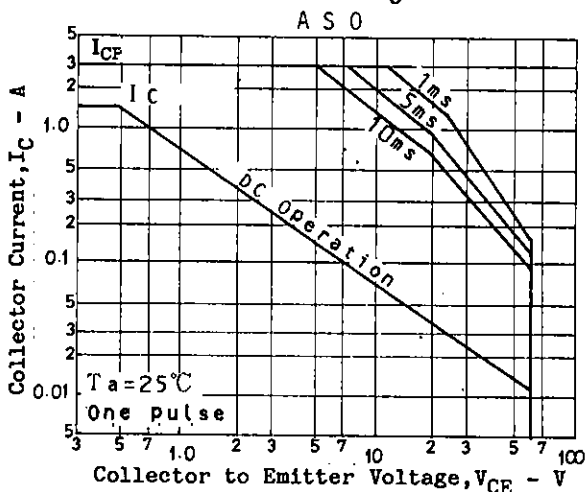
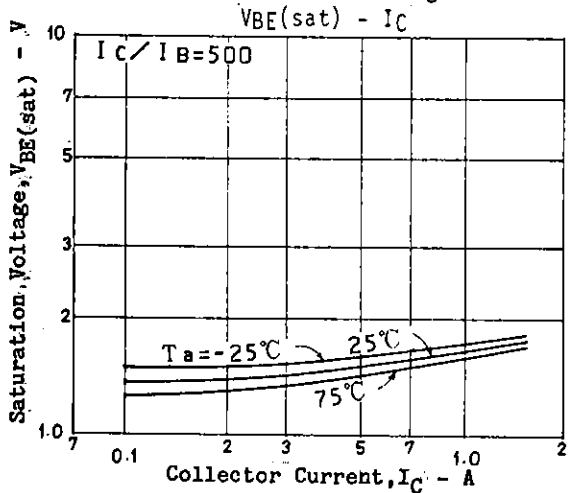
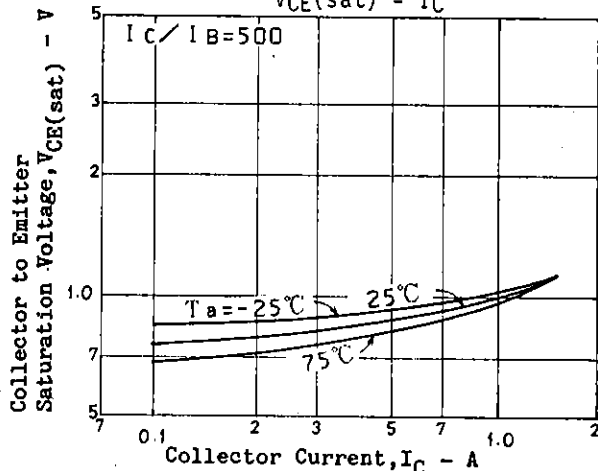
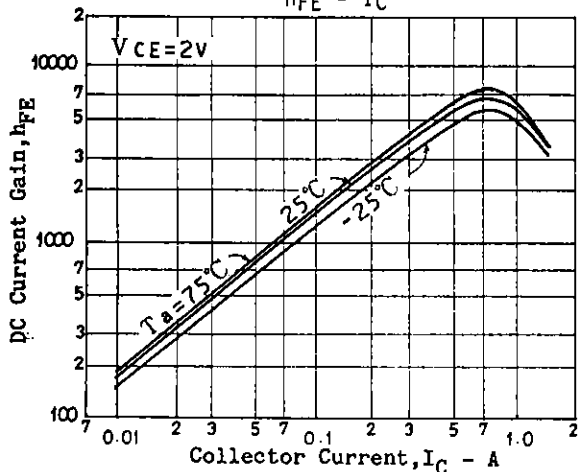
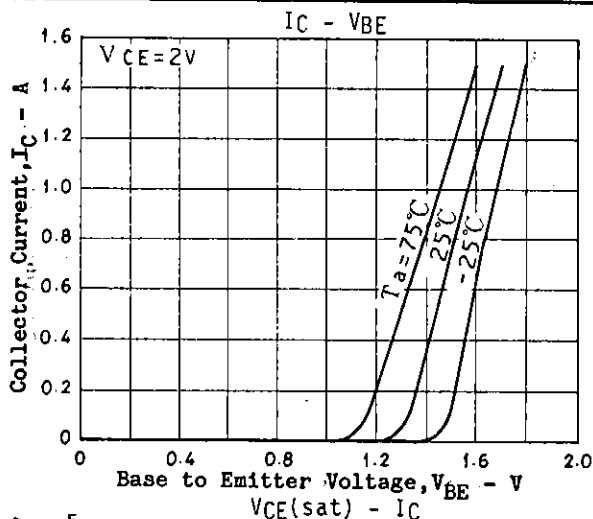
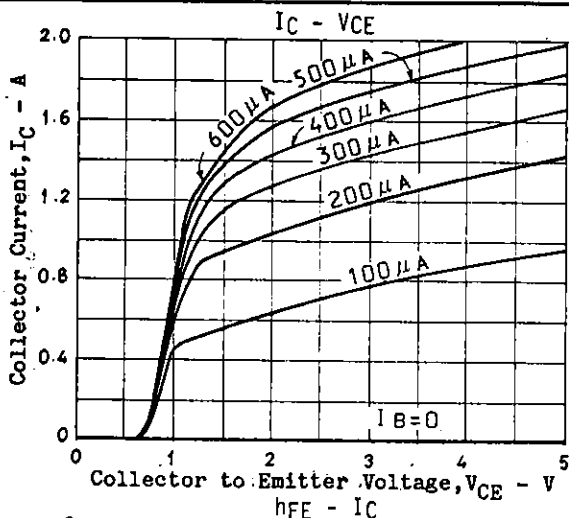
Package Dimensions 2003A

(unit: mm)



JEDEC: TO-92
EIAJ : SC-43
SANYO: NP

B. Base
C. Collector
E. Emitter



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