

SANYO	No.2507	2SD1953
	NPN Epitaxial Planar Type Silicon Transistor	
DRIVER APPLICATIONS		

Applications

- . Motor drivers, printer hammer drivers, relay drivers

Features

- . Darlington connection
- . High DC current gain
- . Low dependence of DC current gain on temperature

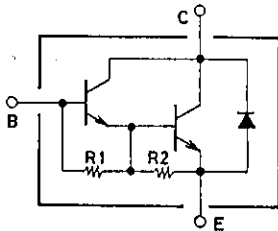
Absolute Maximum Ratings at Ta=25°C

			unit
Collector-to-Base Voltage	V _{CB0}	120	V
Collector-to-Emitter Voltage	V _{CEO}	120	V
Emitter-to-Base Voltage	V _{EBO}	6	V
Collector Current	I _C	1.5	A
Peak Collector Current	i _{cp}	3	A
Collector Dissipation	P _C	1	W
		10	W
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

Electrical Characteristics at Ta=25°C

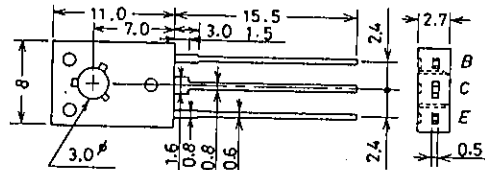
			min	typ	max	unit
Collector Cutoff Current	I _{CB0}	V _{CB} =100V, I _E =0			10	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} =5V, I _C =0			2.5	mA
DC Current Gain	h _{FE} (1)	V _{CE} =3V, I _C =0.5A	1000			
	h _{FE} (2)	V _{CE} =3V, I _C =1A	2000	30000		
C-E Saturation Voltage	V _{CE(sat)}	I _C =1A, I _B =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 =100μA, I _E =0	120			V
C-E Breakdown Voltage	V _{(BR)CEO}	I _C =10mA, R _{BE} =∞	120			V

Electrical Connection



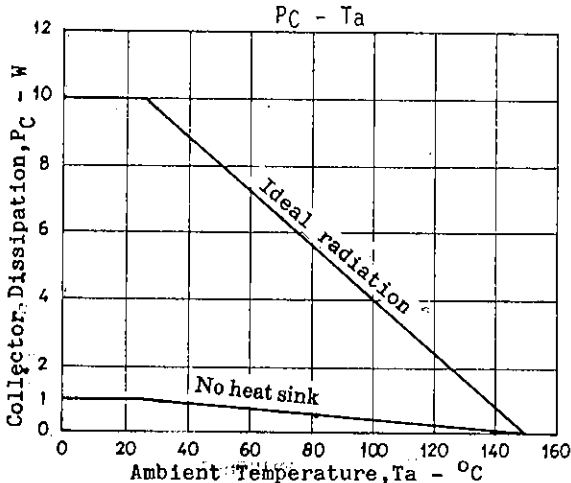
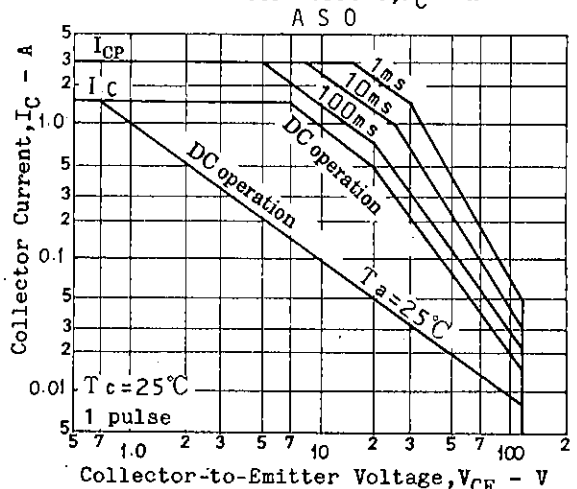
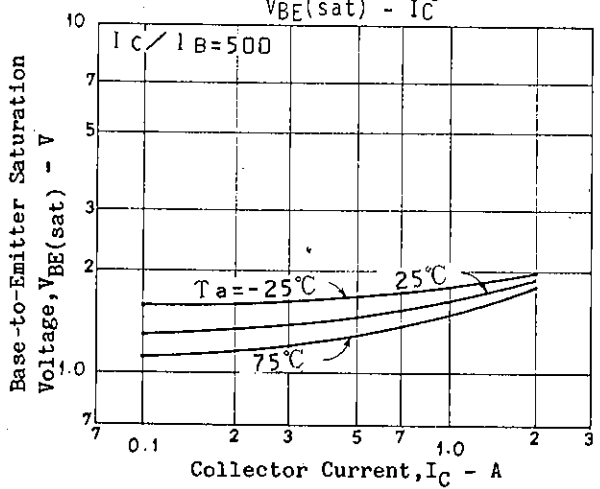
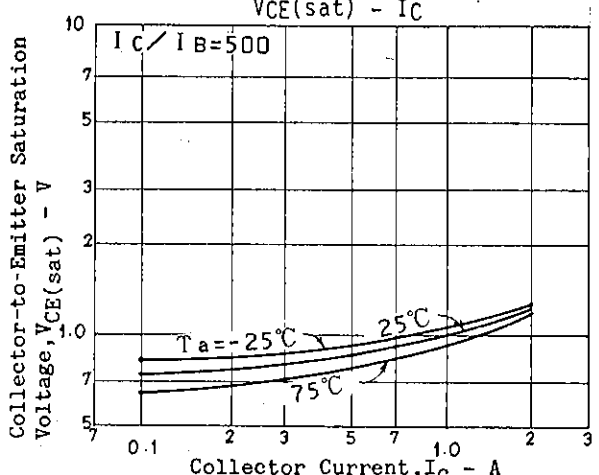
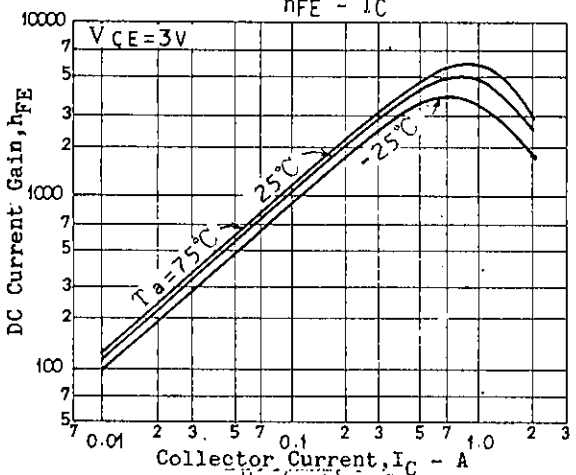
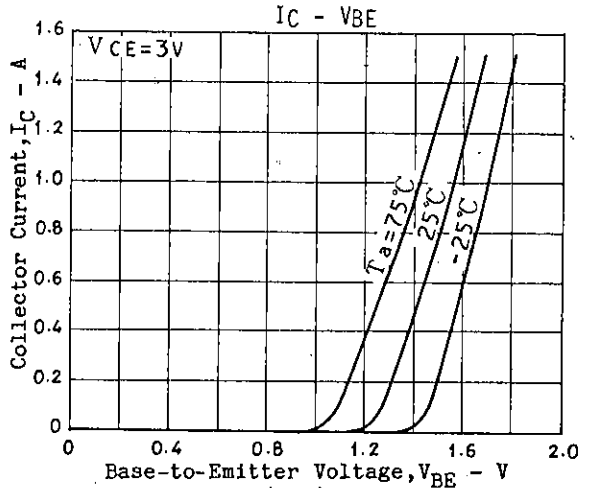
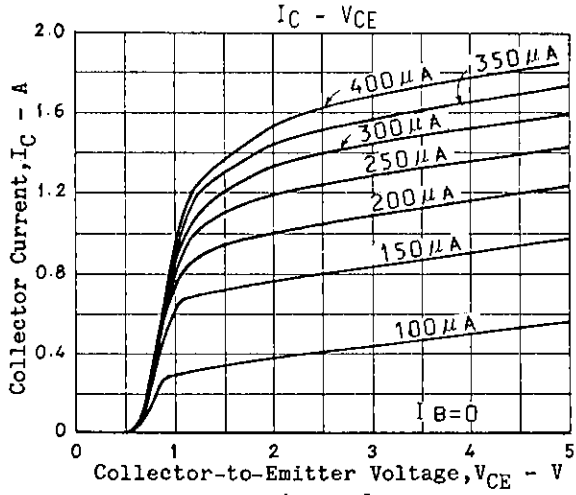
R1 ≅ 5kΩ
R2 ≅ 500Ω

Package Dimensions 2009A
(unit:mm)



JEDEC: TO-126

B: Base
C: Collector
E: Emitter



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