

<b>SANYO</b>	No.2534	2SD1981
	NPN Epitaxial Planar Silicon Darlington Transistor	
<b>Driver Applications</b>		

**Applications**

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

**Features**

- . Darlington connection (on-chip bias resistance, damper diode)
- . High DC current gain
- . Low dependence of DC current gain on temperature

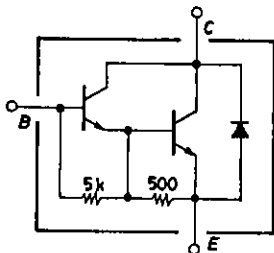
**Absolute Maximum Ratings at Ta=25°C**

			unit
Collector to Base Voltage	V <sub>CB0</sub>	100	V
Collector to Emitter Voltage	V <sub>CE0</sub>	80	V
Emitter to Base Voltage	V <sub>EBO</sub>	6	V
Collector Current	I <sub>C</sub>	2	A
Collector Current(Pulse)	I <sub>CP</sub>	4	A
Collector Dissipation	P <sub>C</sub>	1	W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 to +150	°C

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

			min	typ	max	unit
Collector Cutoff Current	I <sub>CB0</sub>	V <sub>CB</sub> =60V, I <sub>E</sub> =0			10	μA
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> =5V, I <sub>C</sub> =0			2.5	mA
DC Current Gain	h <sub>FE</sub> (1)	V <sub>CE</sub> =3V, I <sub>C</sub> =500mA	1000			
	h <sub>FE</sub> (2)	V <sub>CE</sub> =3V, I <sub>C</sub> =1A	2000	7000	30000	
C-E Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =1A, I <sub>B</sub> =2mA		1.0	1.5	V
B-E Saturation Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =1A, I <sub>B</sub> =2mA		1.6	2.0	V
C-B Breakdown Voltage	V(BR)CBO	I <sub>C</sub> =100μA, I <sub>E</sub> =0	100			V
C-E Breakdown Voltage	V(BR)CEO	I <sub>C</sub> =25mA, R <sub>BE</sub> =∞	80			V

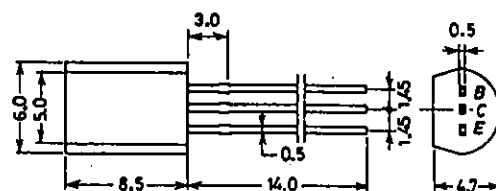
**Electrical Connection**



Unit(Resistance : Ω)

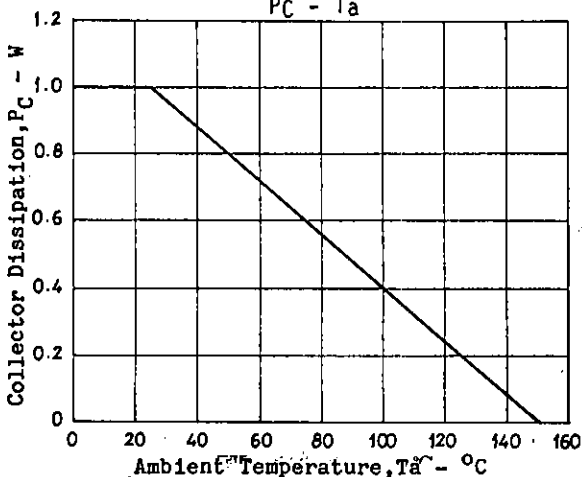
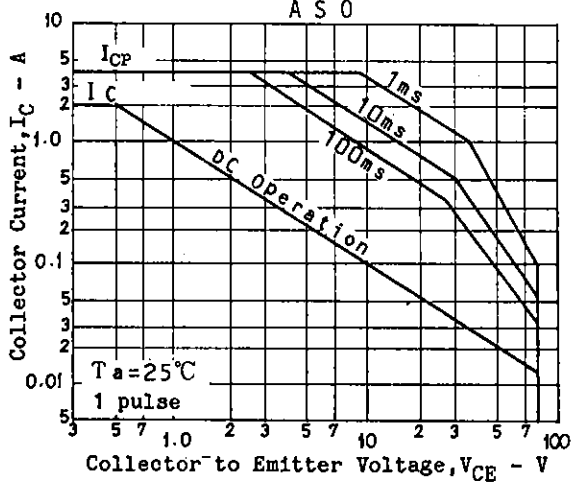
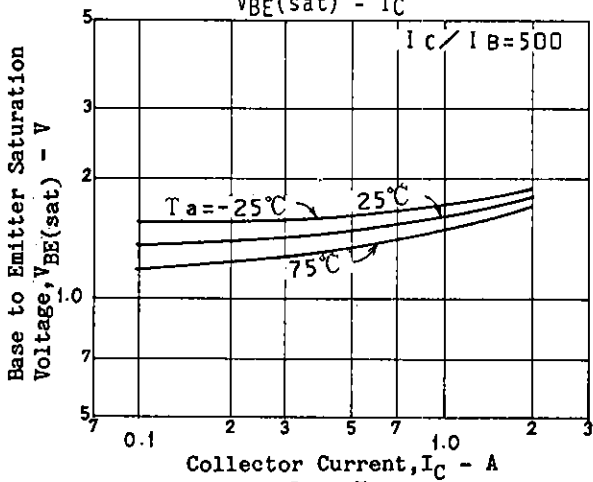
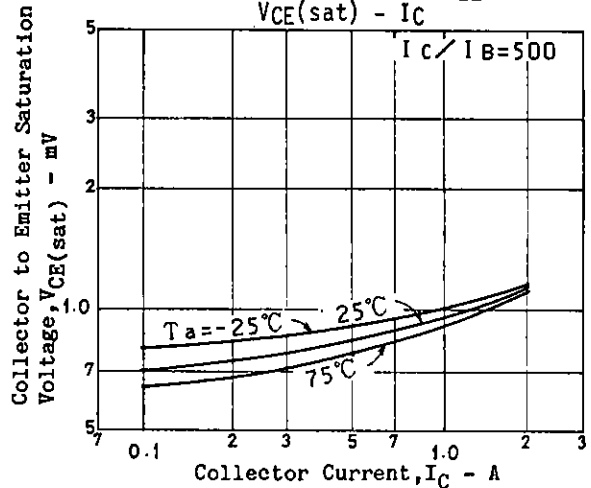
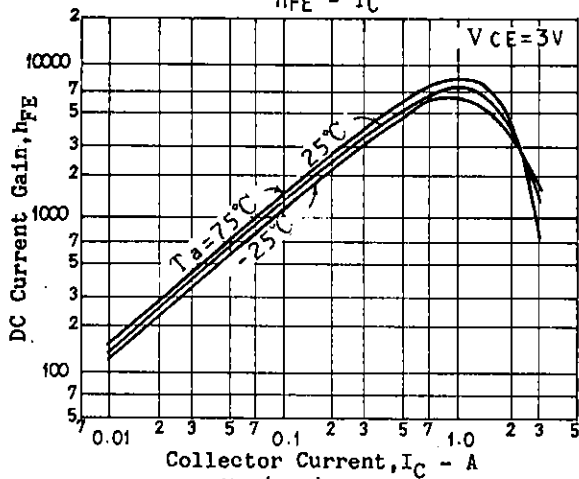
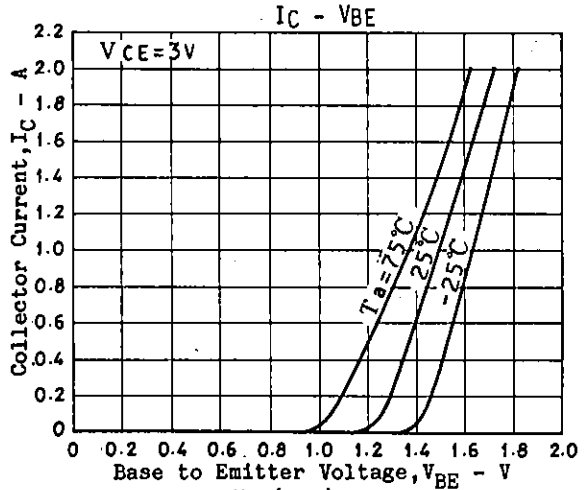
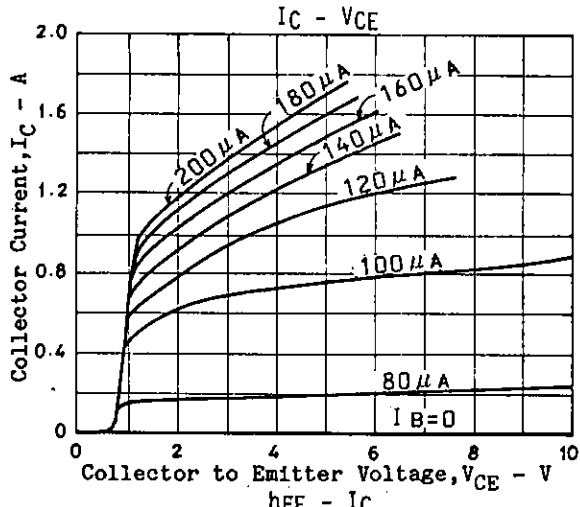
**Package Dimensions 2006A**

(unit: mm)



EIAJ: SC-51  
SANYO:MP

B: Base  
C: Collector  
E: Emitter



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