

SANYO

No. 3203

2SD2116

NPN Epitaxial Planar Silicon Transistor
General Driver Applications

Features

- Darlington connection
- High DC current gain
- Large current capacity, wide ASO

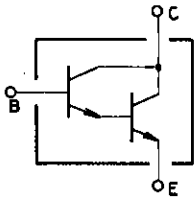
Absolute Maximum Ratings at Ta = 25°C

			unit
Collector to Base Voltage	V _{CB0}	80	V
Collector to Emitter Voltage	V _{CEO}	50	V
Emitter to Base Voltage	V _{EBO}	10	V
Collector Current	I _C	0.7	A
Collector Current(Pulse)	I _{CP}	2	A
Collector Dissipation	P _C	1	W
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

Electrical Characteristics at Ta = 25°C

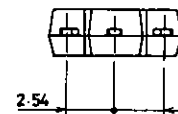
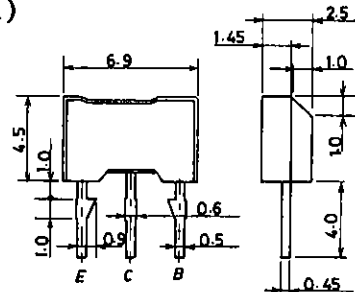
			min	typ	max	unit
Collector Cutoff Current	I _{CBO}	V _{CB} = 40V, I _E = 0			100	nA
Emitter Cutoff Current	I _{EBO}	V _{EB} = 8V, I _C = 0			100	nA
DC Current Gain	h _{FE} (1)	V _{CE} = 2V, I _C = 50mA	5000			
	h _{FE} (2)	V _{CE} = 2V, I _C = 500mA	4000			
Gain-Bandwidth Product	f _T	V _{CE} = 5V, I _C = 50mA		200		MHz
Output Capacitance	c _{ob}	V _{CB} = 10V, f = 1MHz		9		pF
C-E Saturation Voltage	V _{CE(sat)}	I _C = 100mA, I _B = 0.1mA		0.8	1.2	V
B-E Saturation Voltage	V _{BE(sat)}	I _C = 100mA, I _B = 0.1mA		1.4	2.0	V
C-B Breakdown Voltage	V _{(BR)CBO}	I _C = 10μA, I _E = 0	80			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	10			V

Electrical Connection

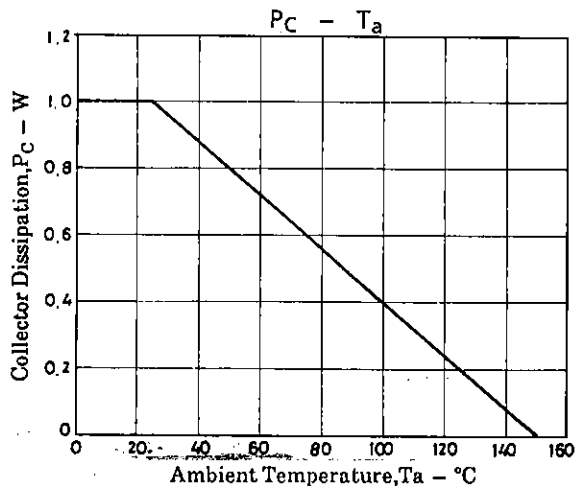
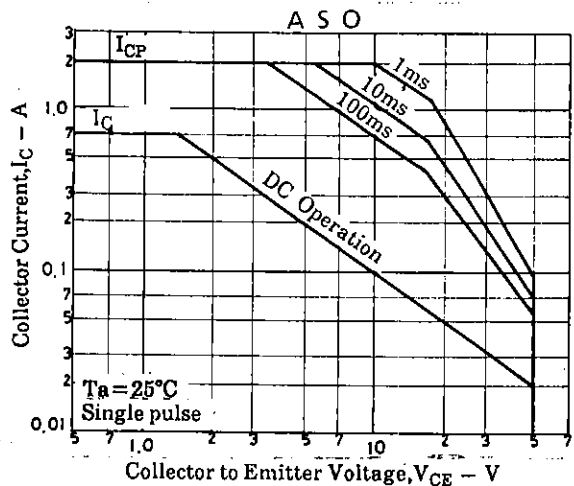
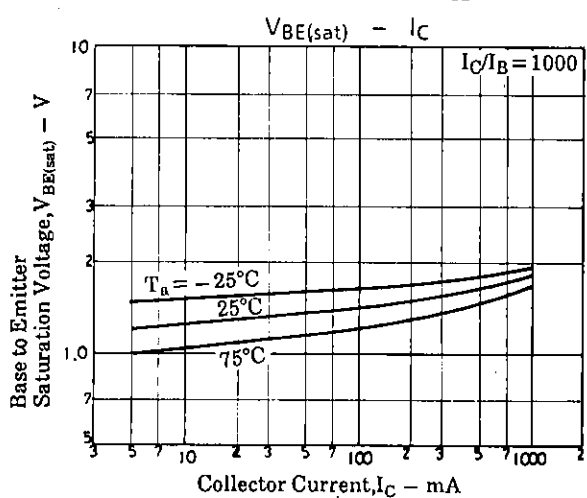
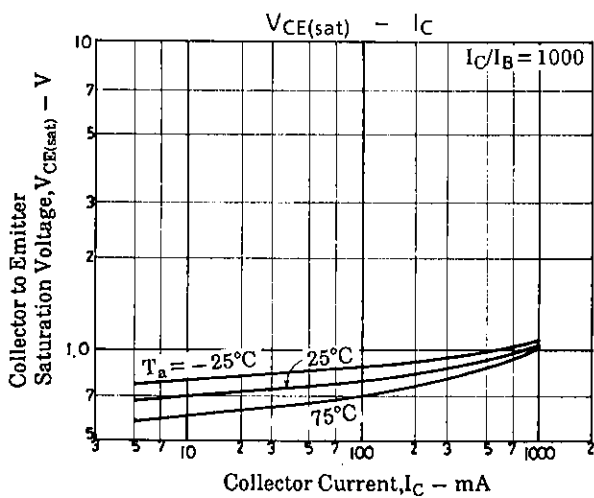
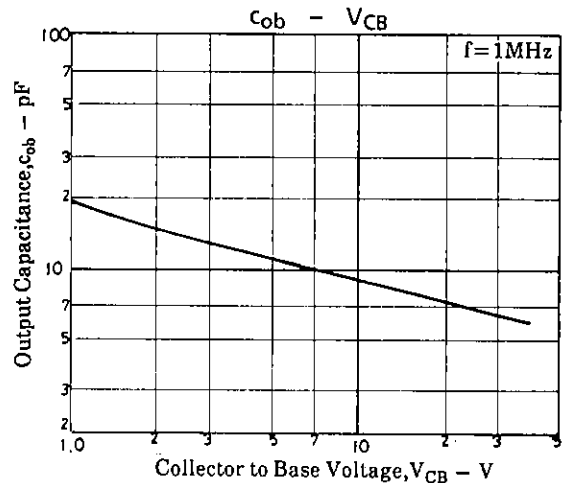
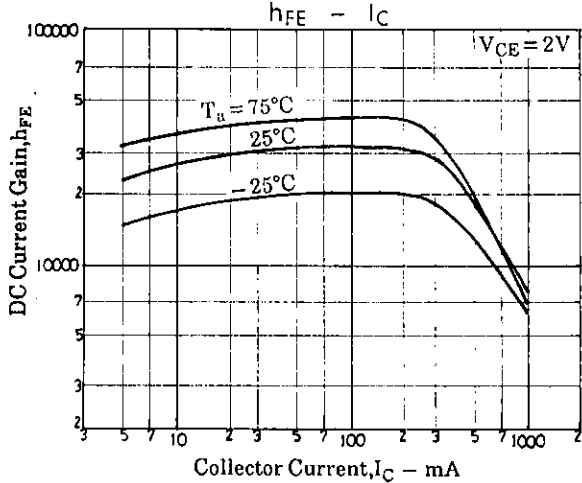
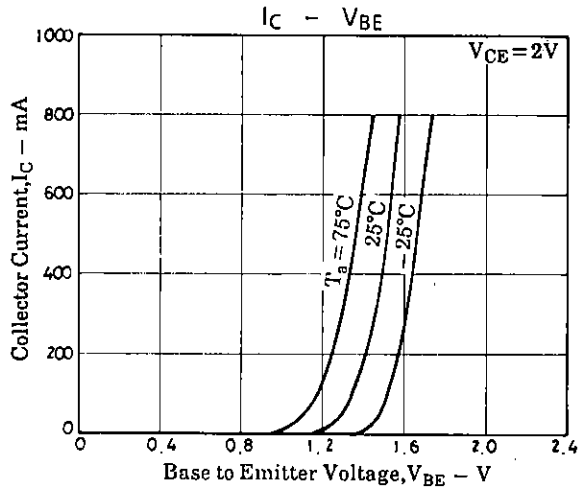
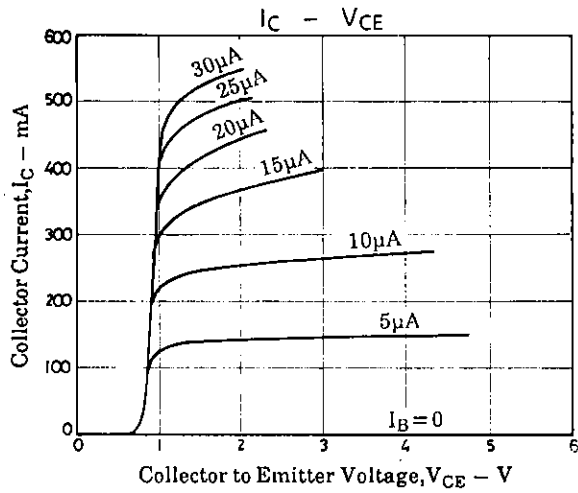


Package Dimensions 2064

(unit: mm)



E: Emitter
C: Collector
B: Base
SANYO: NMP



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