

SANYO	No.4664	2SD2324
		NPN Epitaxial Planar Silicon Transistor

Compact Motor Driver Applications

Features

- Low saturation voltage.
- Contains a diode between collector and emitter.
- Contains a bias resistor between base and emitter.
- Large current capacity.
- Small-sized package facilitating the realization of high-density, small-sized hybrid ICs.

Absolute Maximum Ratings at Ta = 25°C

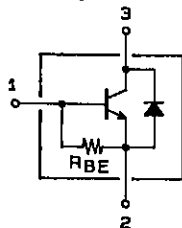
			unit
Collector-to-Base Voltage	V _{CB0}	20	V
Collector-to-Emitter Voltage	V _{CEO}	15	V
Emitter-to-Base Voltage	V _{EBO}	5	V
Collector Current	I _C	0.8	A
Collector Current (Pulse)	I _{CP}	2	A
Collector Dissipation	P _C	200	mW
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Collector Cutoff Current	I _{CB0}	V _{CB} = 15V, I _E = 0			1.0	μA
DC Current Gain	h _{FE}	V _{CE} = 2V, I _C = 0.5A	70			
Gain-Bandwidth Product	f _T	V _{CE} = 2V, I _C = 0.5A		150		MHz
Output Capacitance	C _{ob}	V _{CB} = 10V, f = 1MHz		15		pF
C-E Saturation Voltage	V _{CE(sat)}	I _C = 500mA, I _B = 10mA	0.16	0.3		V
B-E Saturation Voltage	V _{BE(sat)}	I _C = 500mA, I _B = 10mA	0.85	1.2		V
C-B Breakdown Voltage	V _{(BR)CBO}	I _C = 10μA, I _E = 0	20			V
C-E Breakdown Voltage	V _{(BR)CEO(1)}	I _C = 10μA, R _{BE} = ∞	20			V
C-E Breakdown Voltage	V _{(BR)CEO(2)}	I _C = 10mA, R _{BE} = ∞	15			V
Diode Forward Voltage	V _F	I _F = 0.5A			1.5	V
Base-to-Emitter Resistance	R _{BE}			1.0		kΩ

Marking : BN

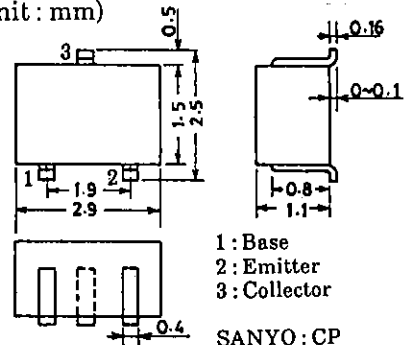
Electrical Connection

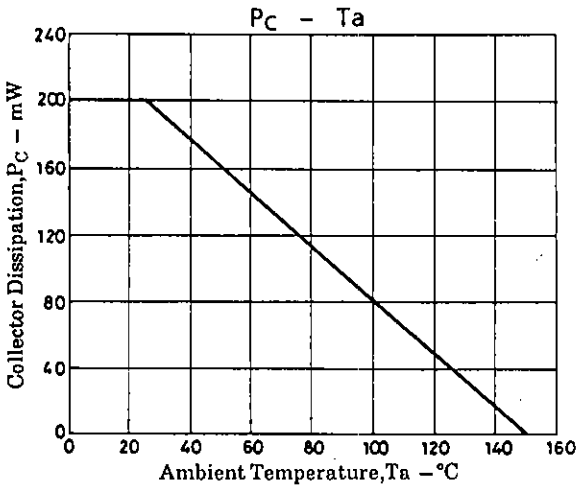
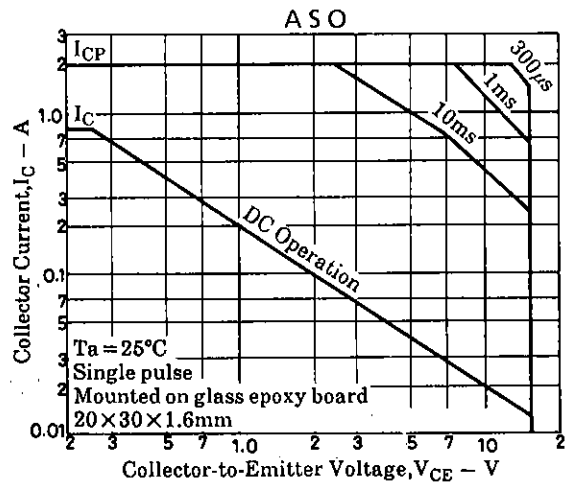
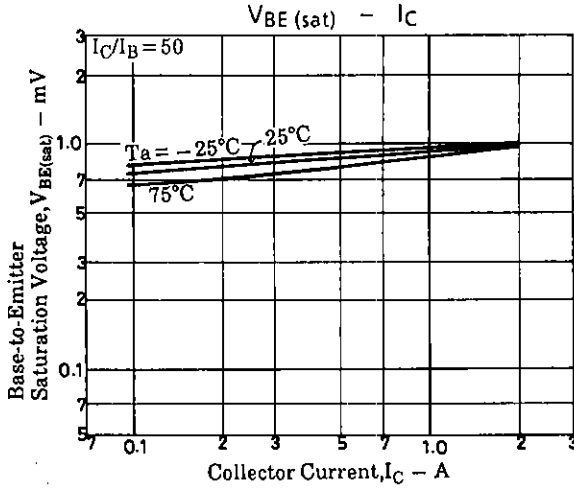
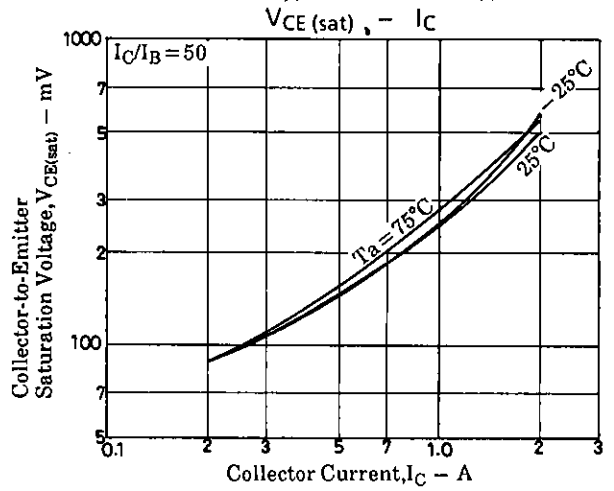
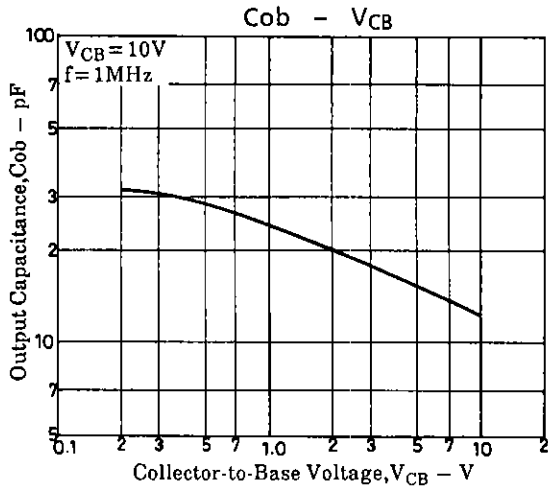
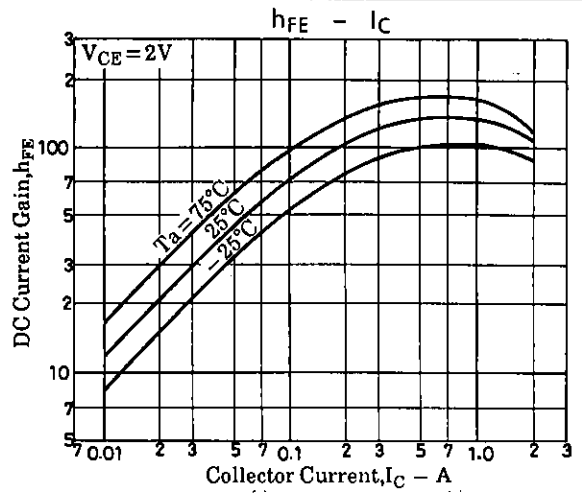
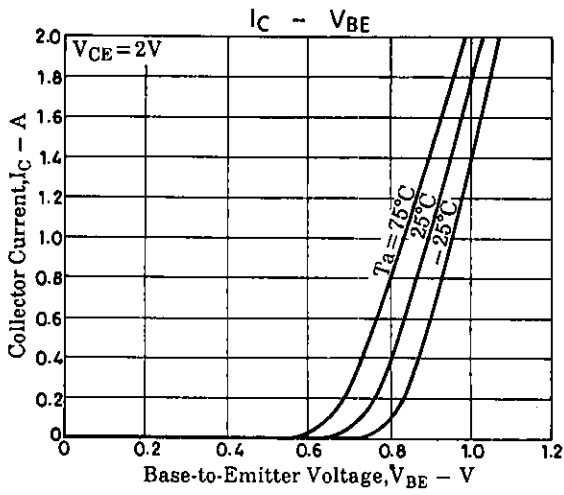


- 1: Base
- 2: Emitter
- 3: Collector

Package Dimensions 2018B

(unit : mm)





- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
 - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use;
 - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.