

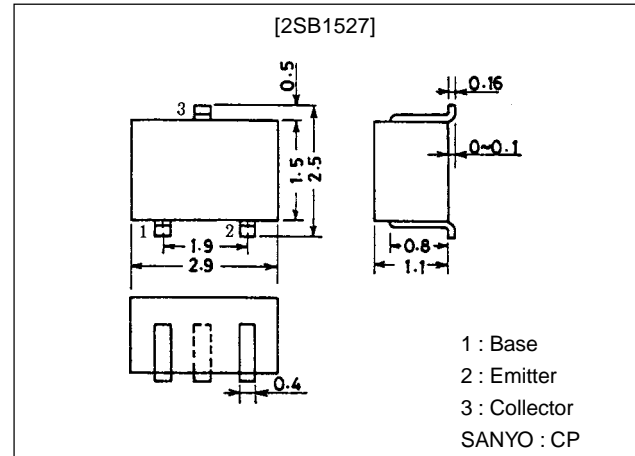
**2SB1527****Compact Motor Driver Applications****Features**

- Low saturation voltage.
- Contains a diode between collector and emitter.
- Contains a bias resistor between base and emitter.
- Large current capacity.
- Compact package making it easy to realize high-density, small-sized hybrid ICs.

**Package Dimensions**

unit:mm

2018B

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

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	$V_{CBO}$		-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**

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=-15V, I_E=0$			-1.0	$\mu A$
DC Current Gain	$h_{FE}$	$V_{CE}=-2V, I_C=-0.5A$	70			
Gain-Bandwidth Product	$f_T$	$V_{CE}=-2V, I_C=-0.5A$		250		MHz
Output Capacitance	$C_{ob}$	$V_{CB}=-10V, f=1MHz$		30		pF
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-500mA, I_B=-10mA$	-0.2	-0.4		V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-500mA, I_B=-10mA$	-0.95	-1.3		V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=-10\mu A, I_E=0$	-20			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-10mA, R_{BE}=\infty$	-15			V

Marking : NS

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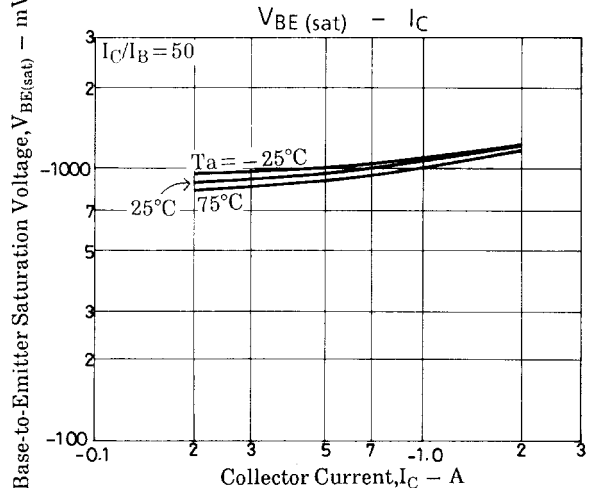
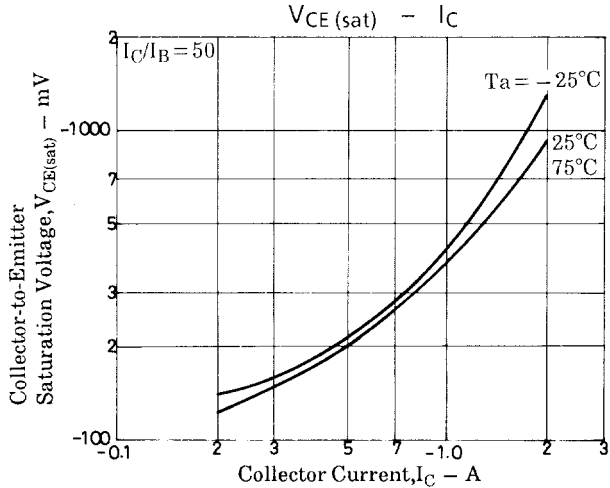
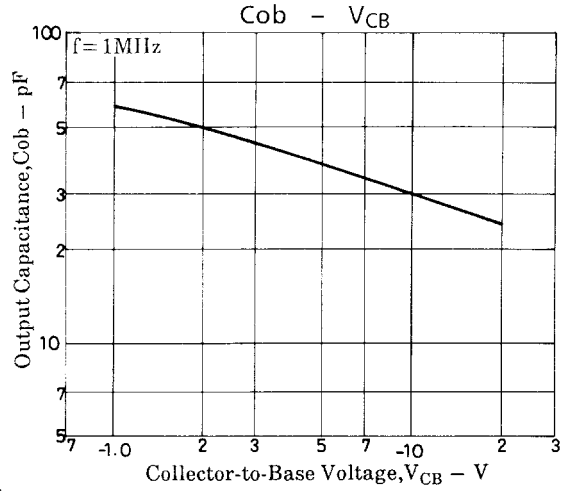
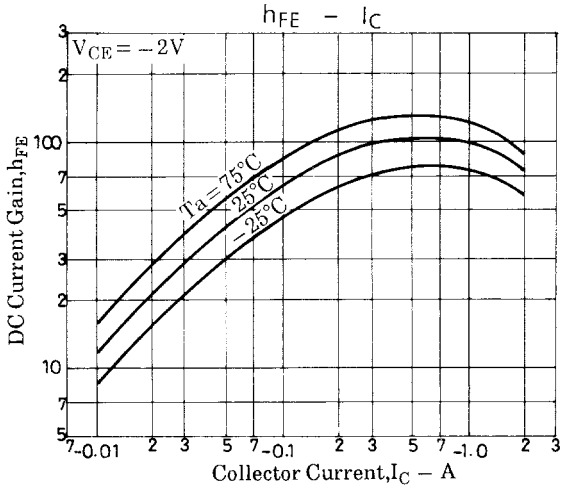
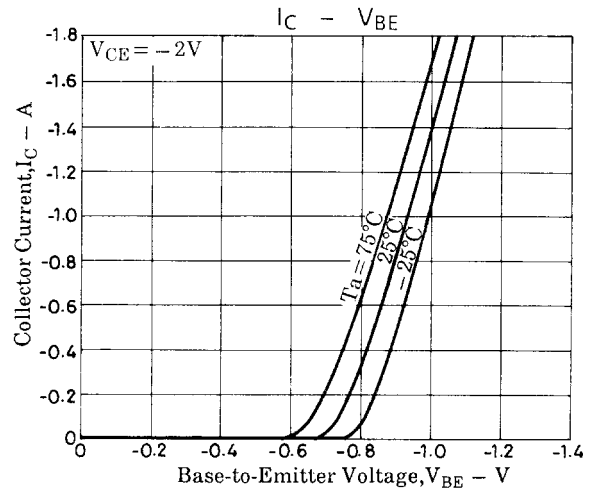
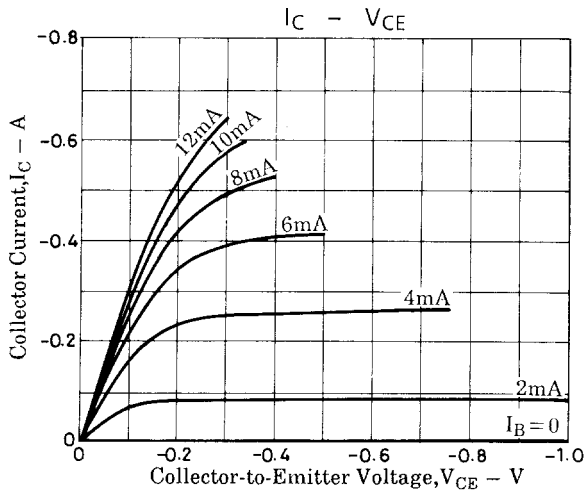
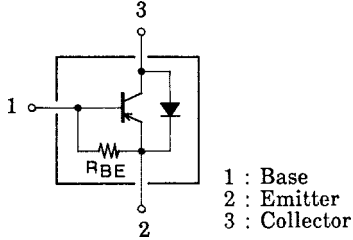
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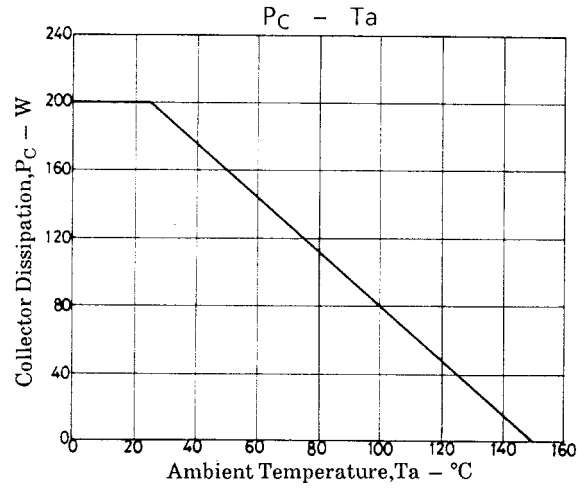
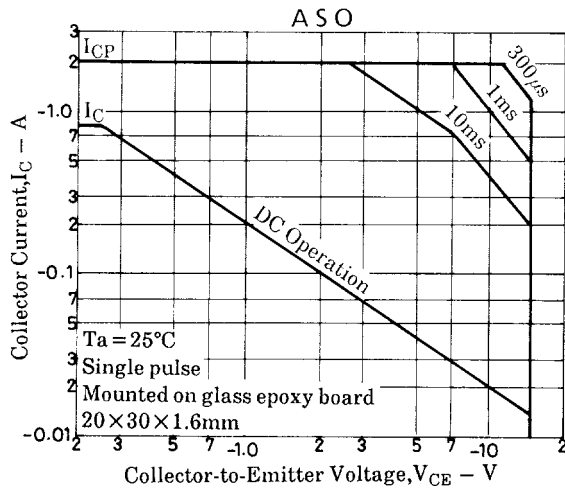
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Diode Forward Voltage	$V_F$	$I_F = -0.5A$			-1.5	V
Base-to-Emitter Resistance	$R_{BE}$			1.0		k $\Omega$

## Electrical Connection



## 2SB1527



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