

2SB826/2SD1062

50V/12A Switching Applications

Applications

· Relay drivers, high-speed inverters, converters, and other general high-current switching applications.

Features

- \cdot Low-saturation collector-to-emitter voltage : VCE(sat)=-0.5V (PNP), 0.4V (NPN) max.
- · Wide ASO leading to high resistance to breakdown.

勝 特 力 材 料 886-3-5753170 胜特力电子(上海) 86-21-34970699 胜特力电子(深圳) 86-755-83298787 Http://www.100y.com.tw

():2SB826

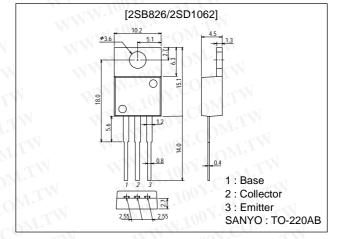
Specifications

Absolute Maximum Ratings at $Ta = 25^{\circ}C$

Package Dimensions

unit:mm

2010C



Parameter	Symbol	Conditions	Ratings	Unit	
Collector-to-Base Voltage	V _{CBO}	M. T. COM.	(-)60	V	
Collector-to-Emitter Voltage	V _{CEO}	W.100 CONL	(–)50	٧	
Emitter-to-Base Voltage	V _{EBO}	1007.00	(-)6	V	
Collector Current	l _C	COMPANY TO	(-)12	Α	
Collector Current (Pulse)	I _{CP}	100 M.I.	(–)15	Α	
Collector Dissipation	√ P _C	Tc=25°C	40	W	
Junction Temperature	Tj	COM	150	°C	
Storage Temperature	Tstg	M. 1003.	-55 to +150	°C	

Electrical Characteristics at Ta = 25°C

N Perenature N COM	Symbol	Conditions	Ratings			Linis
Parameter		Conditions	min	typ	max	Unit
Collector Cutoff Current	I _{CBO}	V _{CB} =(-)40V, I _E =0		1	(-)0.1	mA
Emitter Cutoff Current	I _{EBO}	V _{EB} =(-)4V, I _C =0		MM	(-)0.1	mA
DC Current Gain	h _{FE} 1	V _{CE} =(-)2V, I _C =(-)1A	70*	-11	280*	* 1
	h _{FE} 2	V _{CE} =(-)2V, I _C =(-)5A	30	M.		00 x
Gain-Bandwidth Product	f _T	V _{CE} =(-)5V, I _C =(-)1A		10	M_{AA} .	MHz

 $[\]ast$: The 2SB826/2SD1062 are classified by 1A h_{FE} as follows :

Continued on next page.

Rank	Q	R	S		
hFE	70 to 140	100 to 200	140 to 280		

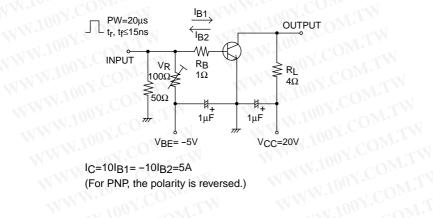
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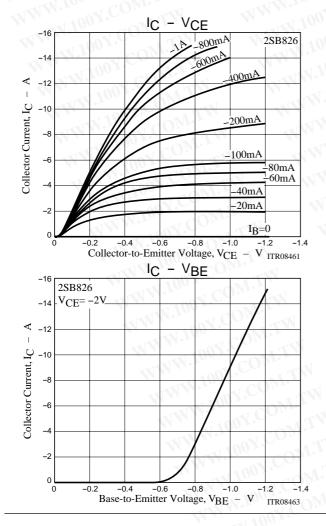
Parameter	Symbol	Conditions	Ratings			Unit
Falametei	Symbol		min	typ	max	Offic
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	I _C =(-)6A, I _B =(-)0.3A	1		0.4	٧ ;
Collector-to-Base Breakdown Voltage	V _{(BR)CBO}	I _C =(-)1mA, I _E =0	(-)60		(-0.5)	V
Collector-to-Emitter Breakdown Voltage	V _(BR) CEO	I _C =(−)1mA, R _{BE} =∞	(-)50			V
Emitter-to-Base Breakdown Voltage	V(BR)EBO	I _E =(-)1mA, I _C =0	(–)6			V
Turn-ON Time	C t _{on}	See specified test circuit.		(0.2)		μs
			TAL	0.1		μs
Fall Time	t _f	See specified test circuit.		(0.4)		μs
			10.2	1.2		μs
Storage Time	t _{stg}	See specified test circuit.	MIN	(0.1)		μs
)	0.05		μs

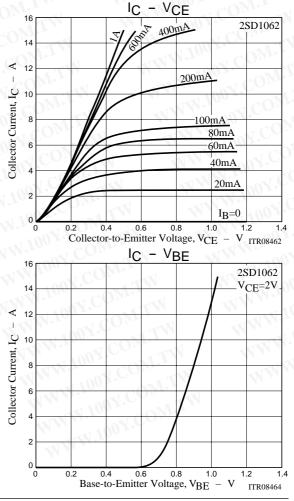
Switching Time Test Circuit



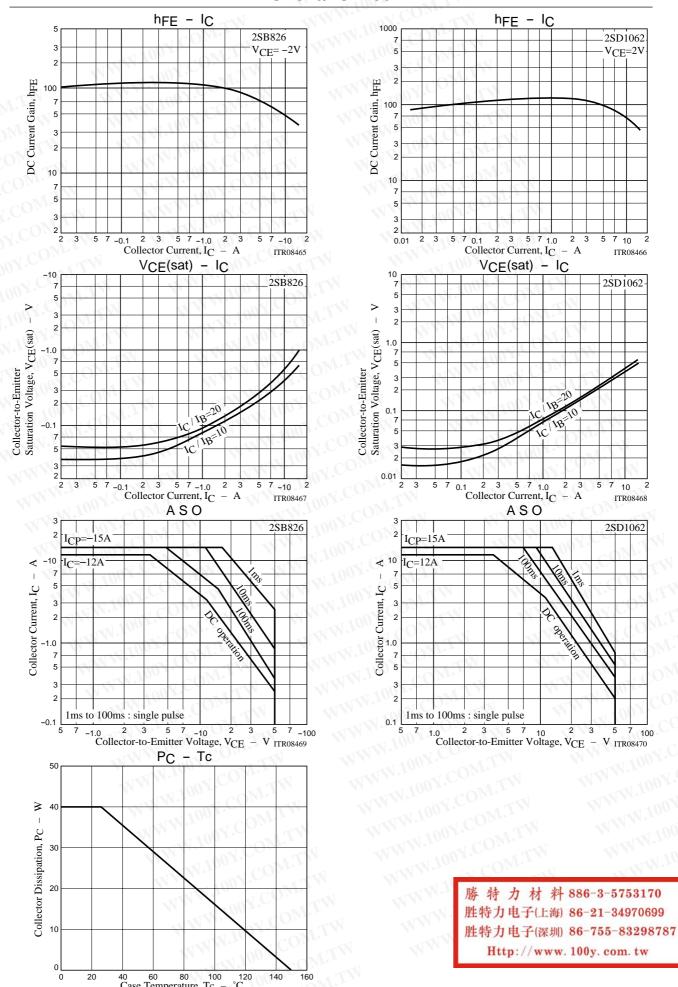
IC=10IB1= -10IB2=5A (For PNP, the polarity is reversed.)

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40 60 80 100 120 Case Temperature, Tc - °C

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