

Driver Applications

Applications

· Suitable for use in control of motor drivers, printer hammer drivers, and constant-voltage regulators.

Features

- · High DC current gain.
- · Large current capacity and wide ASO.
- · Micaless package facilitating mounting.

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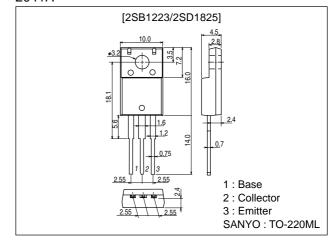
Specifications

Absolute Maximum Ratings at Ta = 25°C

Package Dimensions

unit:mm

2041A



Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CBO}		(–)70	V
Collector-to-Emitter Voltage	V _{CEO}		(-)60	V
Emitter-to-Base Voltage	V _{EBO}		(-)6	V
Collector Current	lС		(-)4	Α
Collector Current (Pulse)	I _{CP}		(-)6	Α
Collector Dissipation	D-		2.0	W
	PC	Tc=25°C	20	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions		Ratings		
	Symbol		min	typ	max	Unit
Collector Cutoff Current	ICBO	V _{CB} =(-)40V, I _E =0			(–)0.1	mA
Emitter Cutoff Current	I _{EBO}	V _{EB} =(-)5V, I _C =0			(-)3.0	mA
DC Current Gain	h _{FE}	V _{CE} =(-)2V, I _C =(-)2A	2000	5000		
Gain-Bandwidth Product	fT	V _{CE} =(-)5V, I _C =(-)2A		20		MHz
Collector-to-Emitter Saturation Voltage	V	I _C =(-)2A, I _B =(-)4mA		0.9	(–)1.5	V
	VCE(sat)			(-1.0)		V
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =(-)2A, I _B =(-)4mA			(-)2.0	V

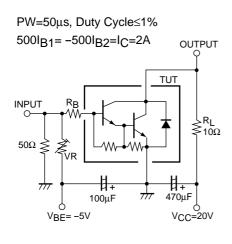
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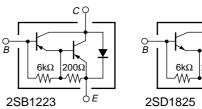
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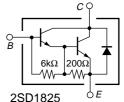
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Oill
Collector-to-Base Breakdown Voltage	V(BR)CBO	I _C =(-)5mA, I _E =0	(-)70			V
Collector-to-Emitter Breakdown Voltage	V _(BR) CEO	$I_C=(-)50mA$, $R_{BE}=\infty$	(-)60			V
Turn-ON Time	t _{on}	See specified Test Circuit		0.6		μs
				(0.5)		μs
Storage Time	t _{stg}	See specified Test Circuit		2.7		μs
				(1.4)		μs
Fall Time	t _f	See specified Test Circuit		1.6		μs
				(1.2)		μs

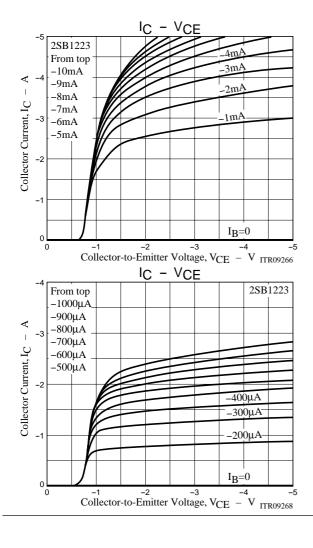
Switching Time Test Circuit

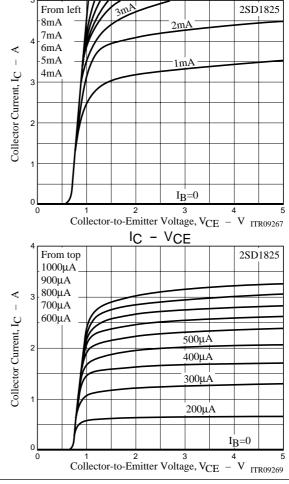


Electrical Connection

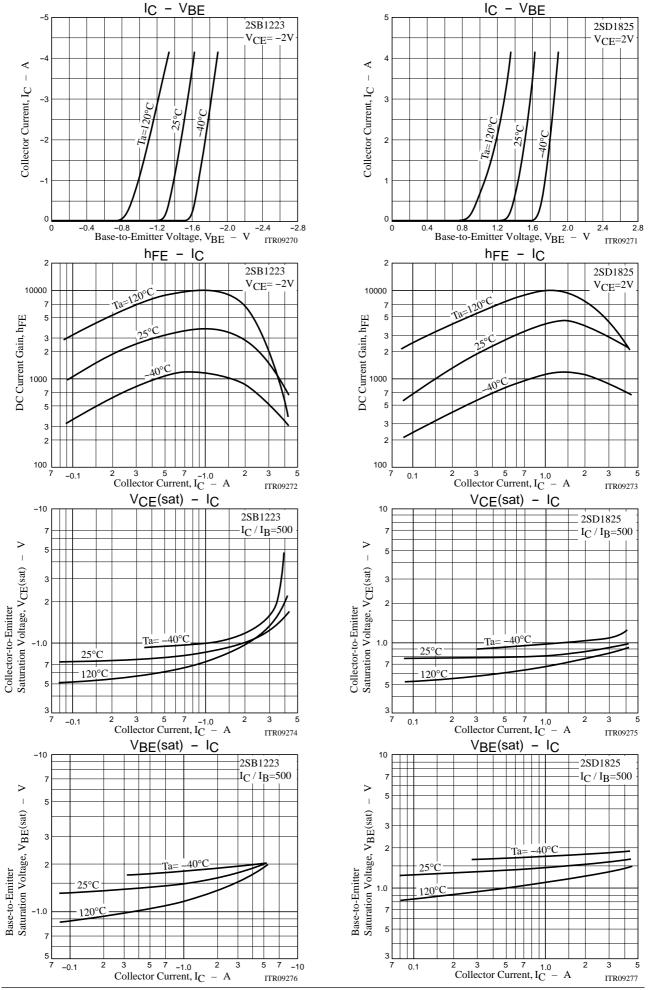


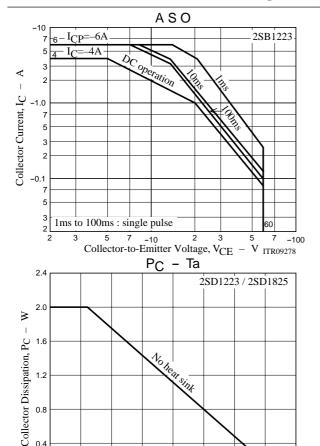






IC - VCE





60

80

Ambient Temperature, Ta -

100

120

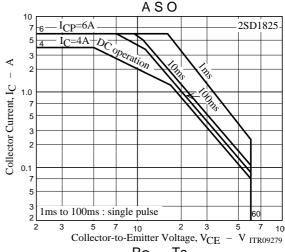
°C

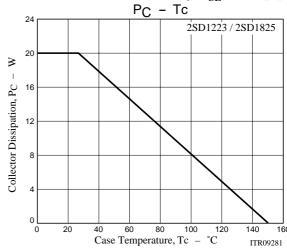
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