

2SB865/2SD1153

Drivers Applications

Applications

· Relay drivers, hammer drivers, lamp drivers, motor drivers.

Features

- · High DC current gain (4000 or more).
- · Large current capacity and wide ASO.
- · Low saturation voltage.

(): 2SB865

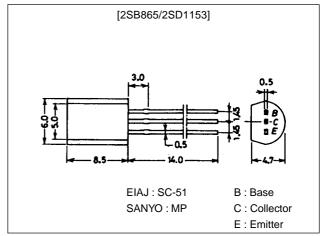
Specifications

Absolute Maximum Ratings at Ta = 25°C

Package Dimensions

unit:mm

2006A



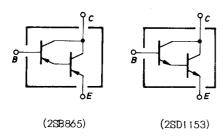
Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CBO}		(–)80	V
Collector-to-Emitter Voltage	VCEO		(-)50	V
Emitter-to-Base Voltage	V _{EBO}		(–)10	V
Collector Current	IC		(-)1.5	Α
Collector Current (Pulse)	I _{CP}		(–)3	Α
Collector Dissipation	PC		900	mW
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

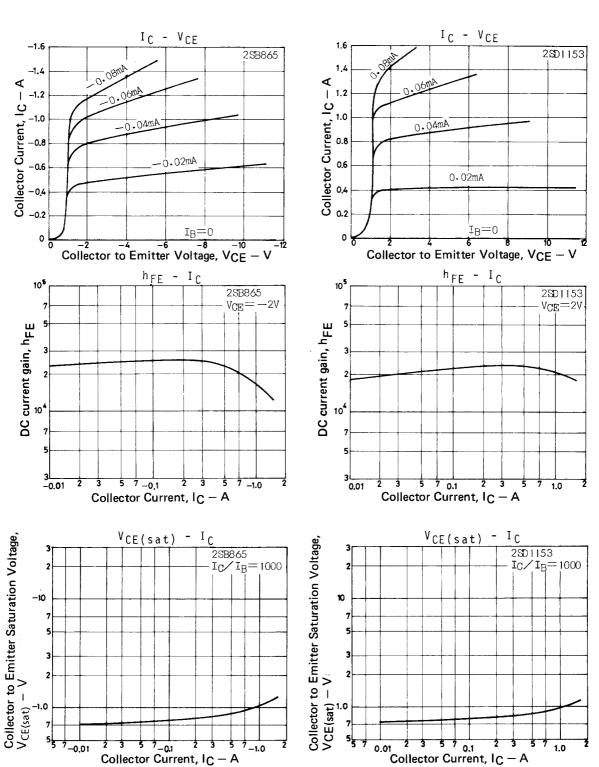
Electrical Characteristics at Ta = 25°C

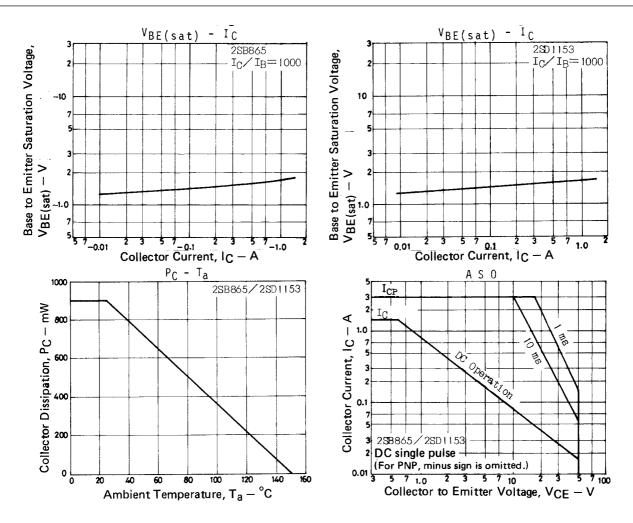
Parameter	Symbol	Conditions		Ratings		
	Symbol		min	typ	max	Unit
Collector Cutoff Current	ICBO	V _{CB} =(-)40V, I _E =0			(–)0.1	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} =(-)8V, I _C =0			(–)0.1	μA
DC Current Gain	h _{FE} 1	V _{CE} =(-)2V, I _C =(-)500mA	4000			
	h _{FE} 2	V _{CE} =(-)2V, I _C =(-)10mA	3000			
Gain-Bandwidth Product	f _T	V _{CE} =(-)10V, I _C =(-)50mA		120		MHz
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	I _C =(-)500mA, I _B =(-)0.5mA		(-)0.9	(–)1.5	V
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =(-)500mA, I _B =(-)0.5mA		(–)1.5	(-)2.0	V
Collector-to-Base Breakdown Voltage	V(BR)CBO	I _C =(-)10μA, I _E =0	(–)80			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 =(-)10μA, I _C =0	(-)10			V

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Electrical Connection







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