

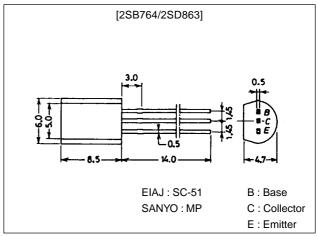
## 2SB764/2SD863

# Voltage Regulator, Relay Lamp Driver Electrical Equipment Applications

### **Package Dimensions**

unit:mm

2006A



(): 2SB764

### **Specifications**

#### Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V <sub>CBO</sub>		(–)60	V
Collector-to-Emitter Voltage	V <sub>CEO</sub>		(–)50	V
Emitter-to-Base Voltage	V <sub>EBO</sub>		(–)5	V
Collector Current	IC		(–)1	Α
Collector Current (Pulse)	I <sub>CP</sub>		(–)2	Α
Collector Dissipation	PC		0.9	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

#### Electrical Characteristics at Ta = 25°C

Parameter	Cumphal	Conditions		Ratings		
	Symbol		min	typ	max	Unit
Collector Cutoff Current	I <sub>CBO</sub>	V <sub>CB</sub> =(-)50V, I <sub>E</sub> =0			(–)1	μA
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> =(-)4V, I <sub>C</sub> =0			(–)1	μA
DC Current Gain	h <sub>FE</sub> 1	V <sub>CE</sub> =(-)2V, I <sub>C</sub> =(-)50mA	60*		320*	
	h <sub>FE</sub> 2	V <sub>CE</sub> =(-)2V, I <sub>C</sub> =(-)1A	30			
Gain-Bandwidth Product	fT	V <sub>CE</sub> =(-)10V, I <sub>C</sub> =(-)50mA		150		MHz
Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> =(-)10V, f=1MHz		(20)		pF
				12		pF
Collector-to-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =(-)500mA, I <sub>B</sub> =(-)50mA		(-0.2)	(-0.7)	V
				0.15	0.5	V
Base-to-Emitter Saturation Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =(-)500mA, I <sub>B</sub> =(-)50mA		(-)0.85	(-)1.2	V

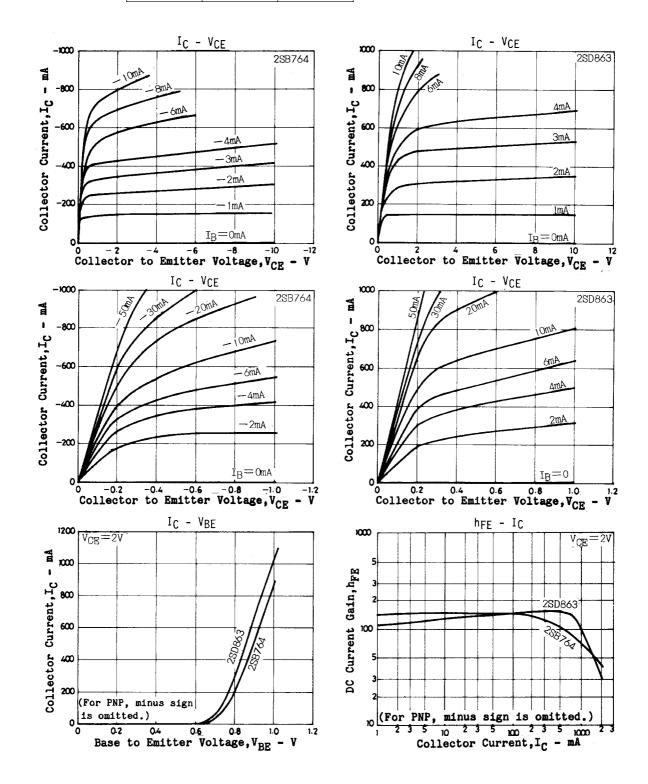
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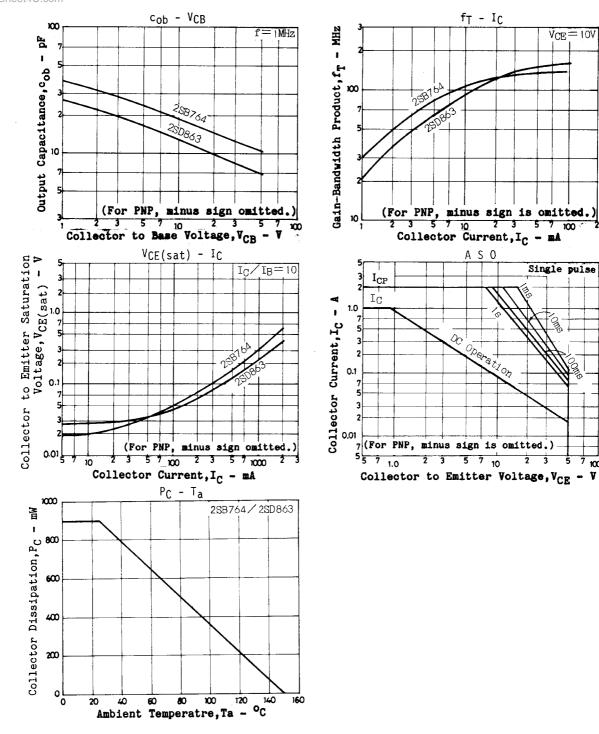
SANYO Electric Co.,Ltd. Semiconductor Bussiness Headquaters

Parameter	Symbol	Conditions	Ratings			Unit
	Syllibol		min	typ	max	Offit
Collector-to-Base Breakdown Voltage	V <sub>(BR)</sub> CBO	I <sub>C</sub> =(-)10μΑ, I <sub>E</sub> =0	(–)60			V
Collector-to-Emitter Breakdown Voltage	V <sub>(BR)</sub> CEO	I <sub>C</sub> =(–)1mA, R <sub>BE</sub> =∞	(–)50			V
Emitter-to-Base Breakdown Votage	V(BR)EBO	I <sub>E</sub> =(-)10μA, I <sub>C</sub> =0	(–)5			V

 $<sup>\</sup>ast$  : The SB764/2SD863 are classified by 50mA  $h_{FE}$  as follows :

60 D 120 100	E 200	160 F	320
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