



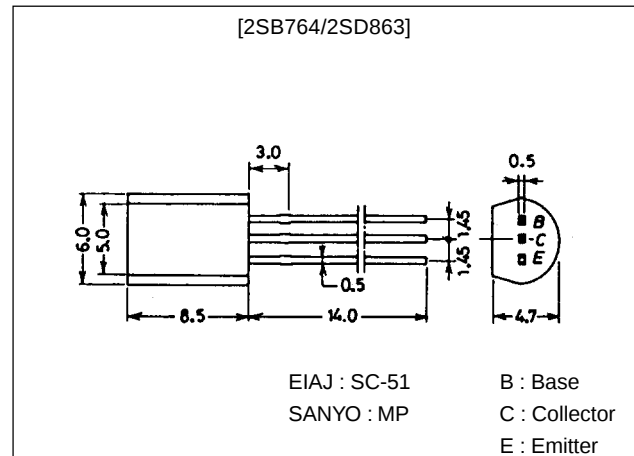
2SB764/2SD863

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_{CBO}		(-)-60	V
Collector-to-Emitter Voltage	V_{CEO}		(-)-50	V
Emitter-to-Base Voltage	V_{EBO}		(-)-5	V
Collector Current	I_C		(-)-1	A
Collector Current (Pulse)	I_{CP}		(-)-2	A
Collector Dissipation	P_C		0.9	W
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}	$V_{CB}=(-)50V, I_E=0$			(-)-1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=(-)4V, I_C=0$			(-)-1	μA
DC Current Gain	h_{FE1}	$V_{CE}=(-)2V, I_C=(-)50mA$	60*		320*	
	h_{FE2}	$V_{CE}=(-)2V, I_C=(-)1A$	30			
Gain-Bandwidth Product	f_T	$V_{CE}=(-)10V, I_C=(-)50mA$		150		MHz
Output Capacitance	C_{ob}	$V_{CB}=(-)10V, f=1MHz$		(20)		pF
				12		pF
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)500mA, I_B=(-)50mA$		(-)-0.2	(-)-0.7	V
				0.15	0.5	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)500mA, I_B=(-)50mA$		(-)-0.85	(-)-1.2	V

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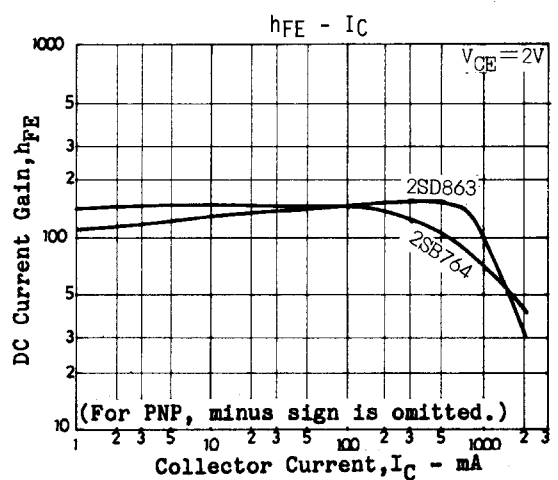
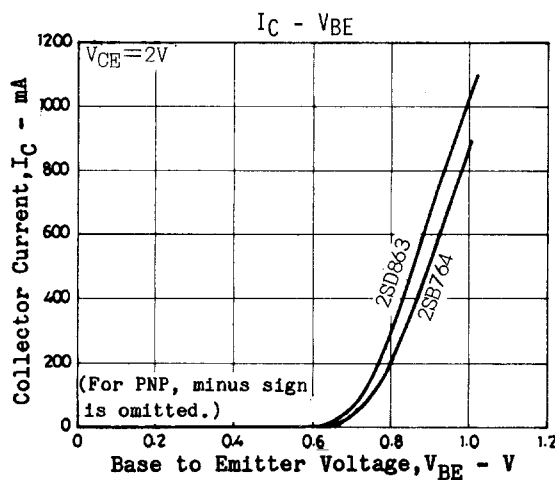
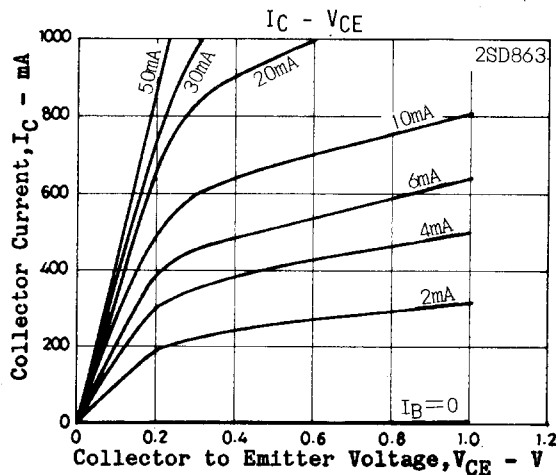
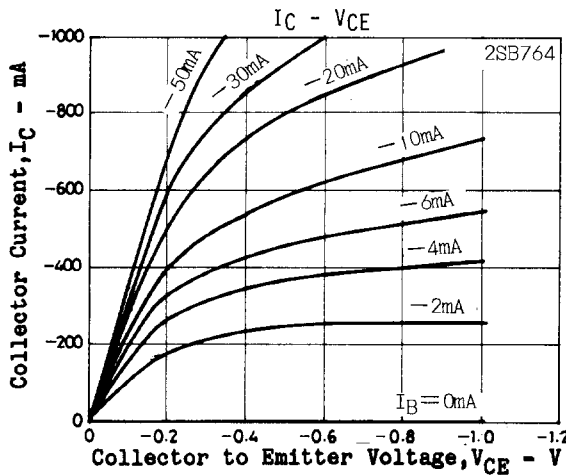
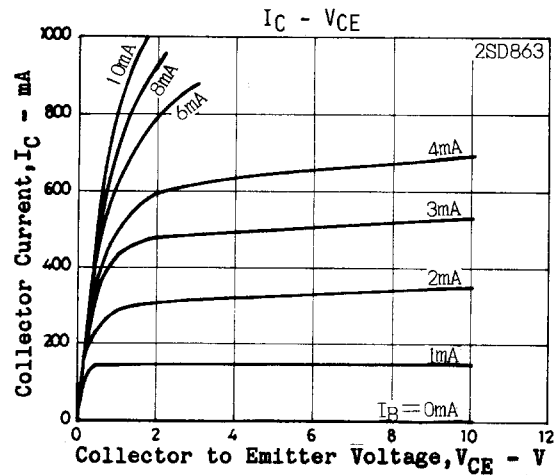
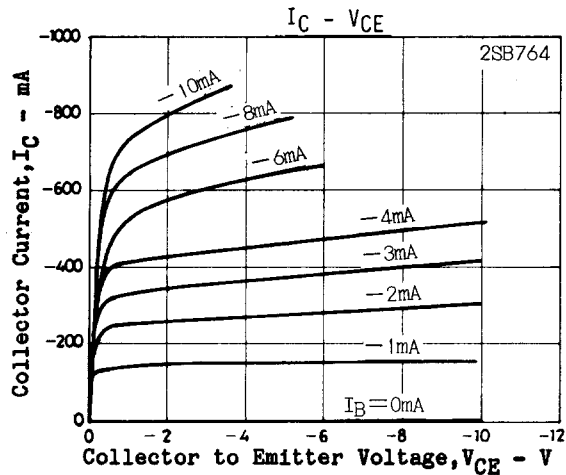
2SB764/2SD863

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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = (-)10\mu A, I_E = 0$	(-)60			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-)1mA, R_{BE} = \infty$	(-)50			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = (-)10\mu A, I_C = 0$	(-)5			V

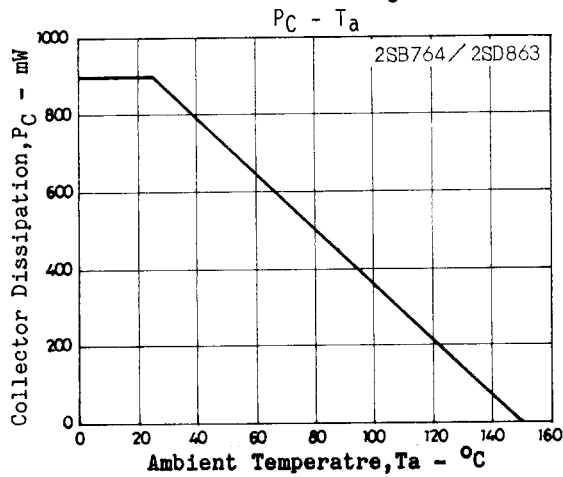
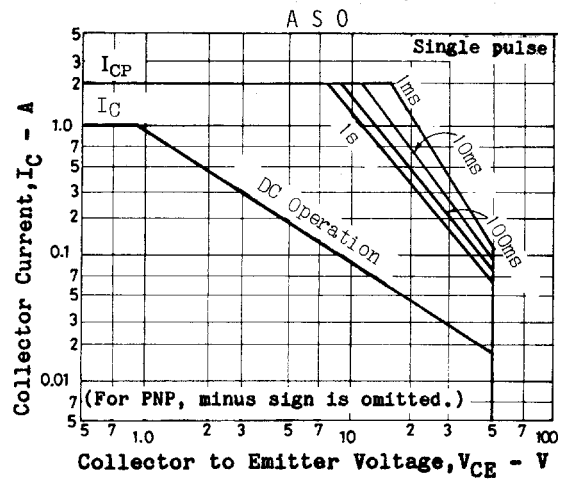
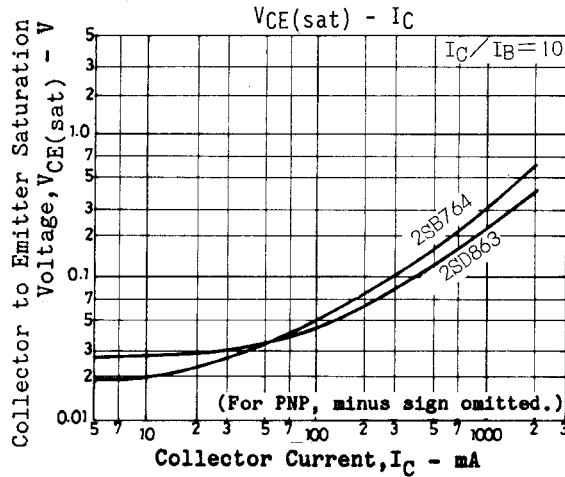
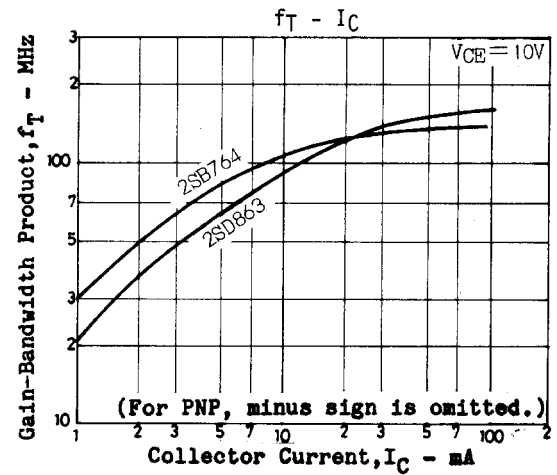
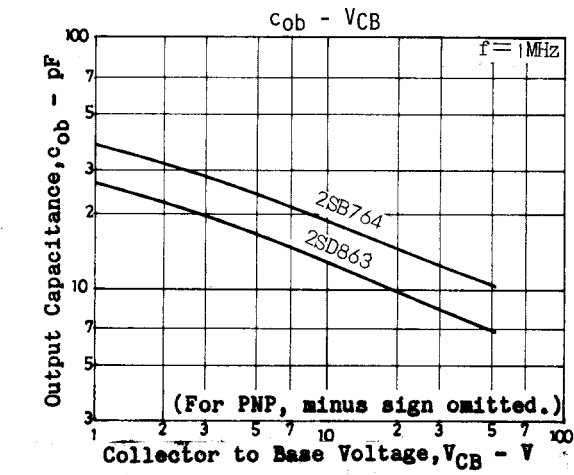
* : The SB764/2SD863 are classified by 50mA h_{FE} as follows :

60	D	120	100	E	200	160	F	320
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2SB764/2SD863

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