



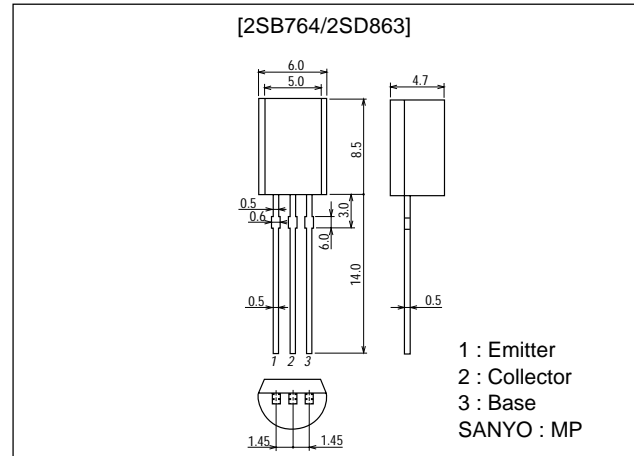
2SB764/2SD863

Voltage Regulator, Relay Lamp Driver Electrical Equipment Applications

Package Dimensions

unit:mm

2006B



() : 2SB764

Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CB0}		(-)-60	V
Collector-to-Emitter Voltage	V_{CE0}		(-)-50	V
Emitter-to-Base Voltage	V_{EB0}		(-)-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	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +150	$^\circ\text{C}$

Electrical Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I_{CBO}	$V_{CB} = (-)50\text{V}, I_E = 0$			(-)-1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = (-)4\text{V}, I_C = 0$			(-)-1	μA
DC Current Gain	h_{FE1}	$V_{CE} = (-)2\text{V}, I_C = (-)50\text{mA}$	60*		320*	
	h_{FE2}	$V_{CE} = (-)2\text{V}, I_C = (-)1\text{A}$	30			
Gain-Bandwidth Product	f_T	$V_{CE} = (-)10\text{V}, I_C = (-)50\text{mA}$		150		MHz
Output Capacitance	C_{ob}	$V_{CB} = (-)10\text{V}, f = 1\text{MHz}$		(20)		pF
				12		pF

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SANYO Electric Co., Ltd. Semiconductor Company

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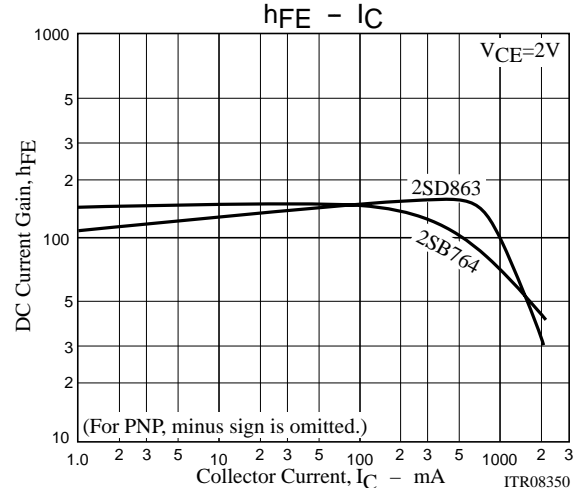
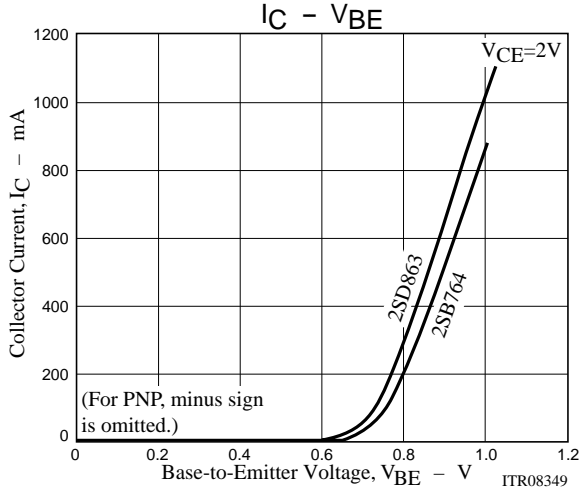
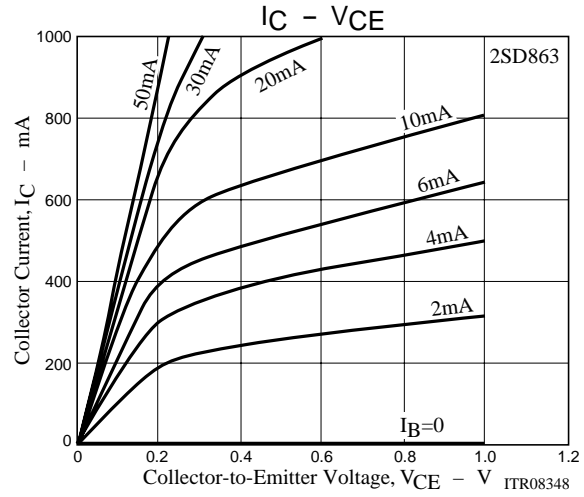
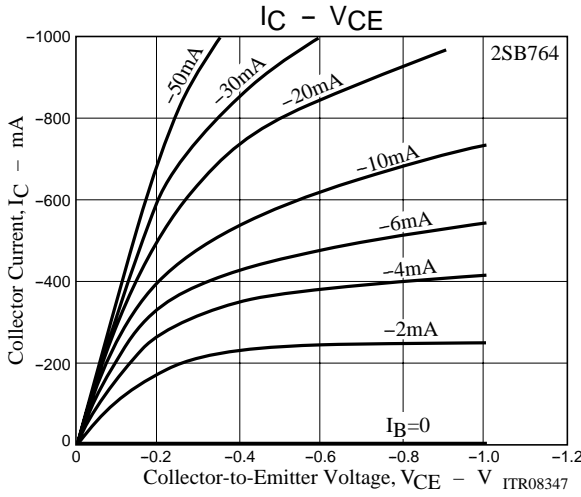
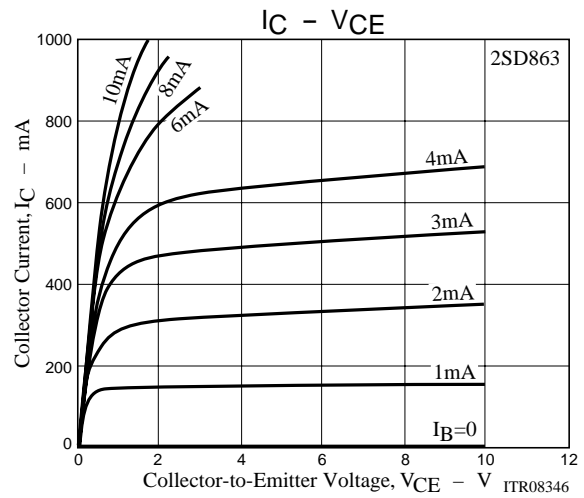
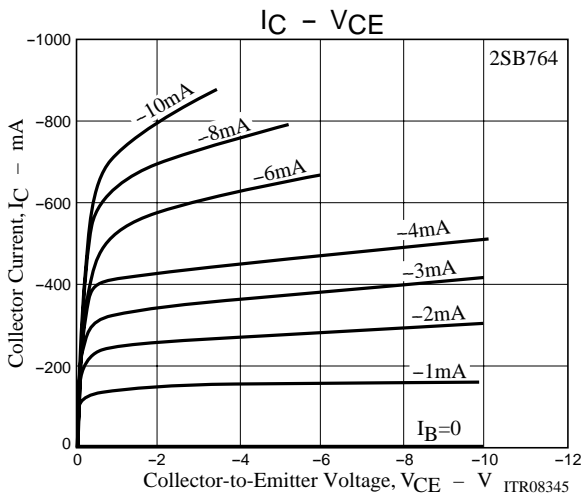
2SB764/2SD863

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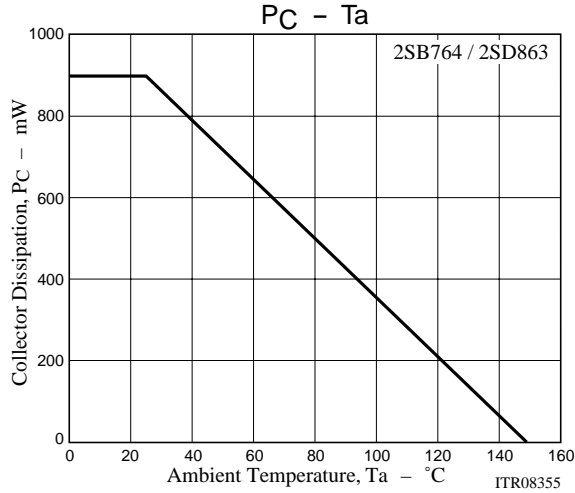
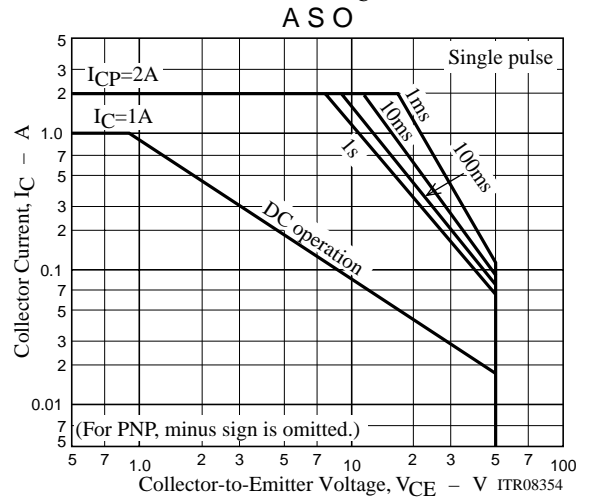
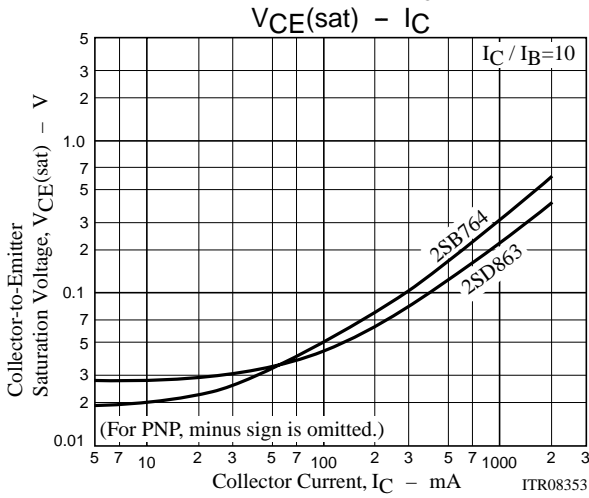
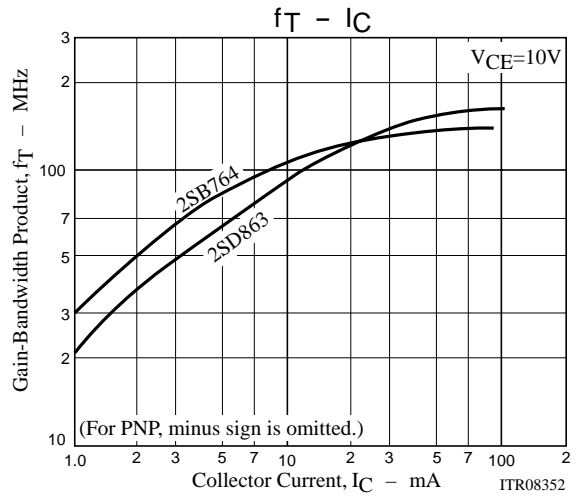
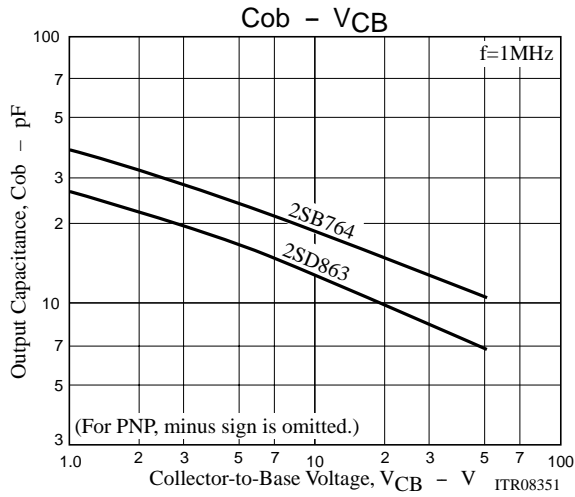
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)500mA, I_B=(-)50mA$		(-0.2)	(-0.7)	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)500mA, I_B=(-)50mA$		0.15	0.5	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)10\mu A, I_E=0$	(-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 :

Rank	D	E	F
h_{FE}	60 to 120	100 to 200	160 to 320



2SB764/2SD863



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