Ordering number:575D

PNP/NPN Epitaxial Planar Silicon Transistors

2SB764/2SD863

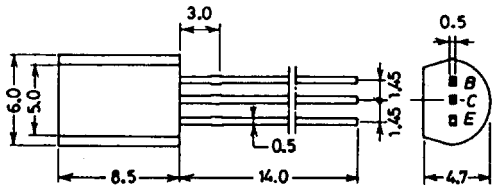
Voltage Regulator, Relay Lamp Driver Electrical Equipment Applications

Package Dimensions

unit:mm

2006A

[2SB764/2SD863]



EIAJ : SC-51
SANYO : MP

B : Base
C : Collector
E : Emitter

( ) : 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	Tj		150	˚C
Storage Temperature	Tstg		–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	$h_{FE}1$	V_{CE}=(–)2V, I_C=(–)50mA	60*		320*	
	$h_{FE}2$	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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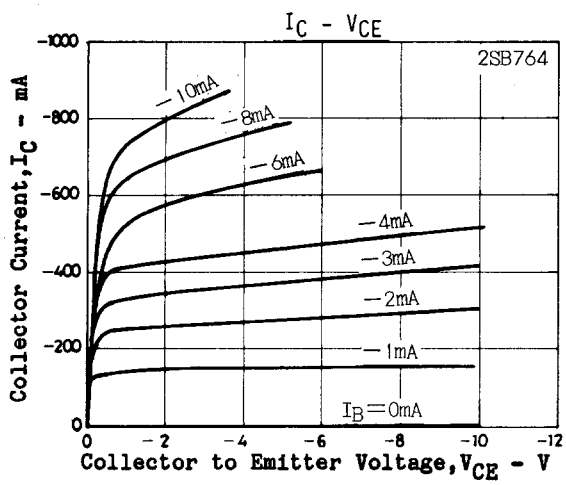
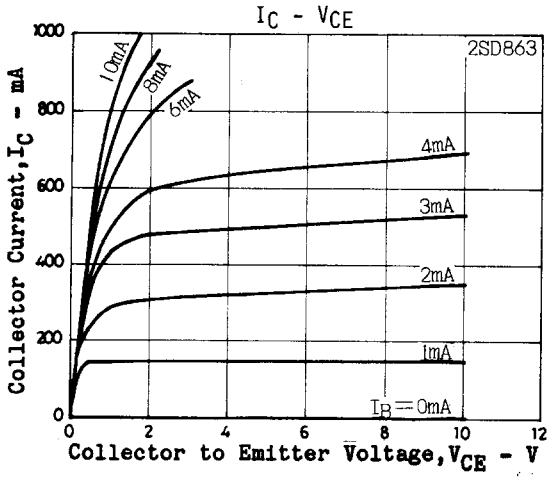
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

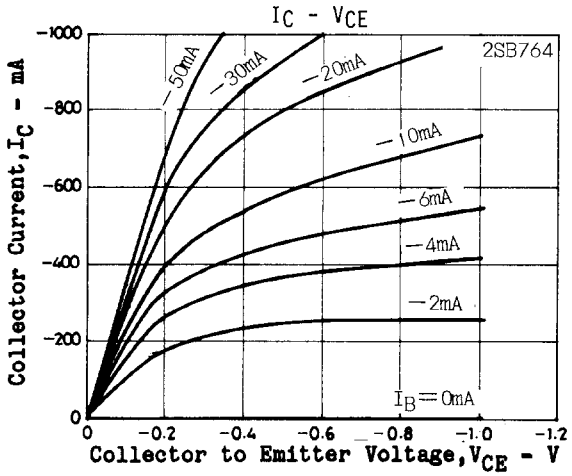
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=(–)10μA, I_E=0	(–)60			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=(–)1mA, R_{BE}=∞	(–)50			V
Emitter-to-Base Breakdown Votage	$V_{(BR)EBO}$	I_E=(–)10μA, I_C=0	(–)5			V

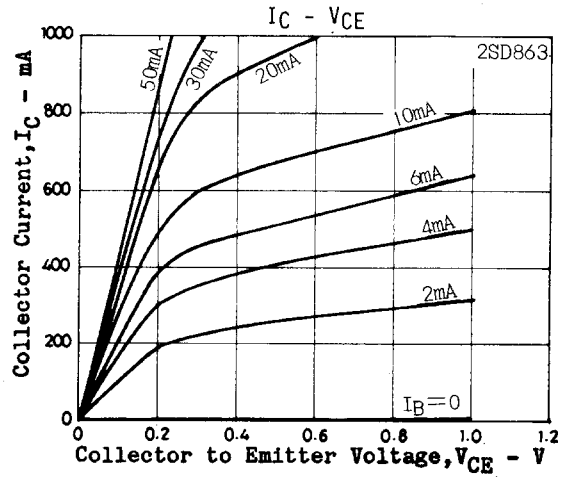
* : The SB764/2SD863 are classified by 50mA h_{FE} as follows :

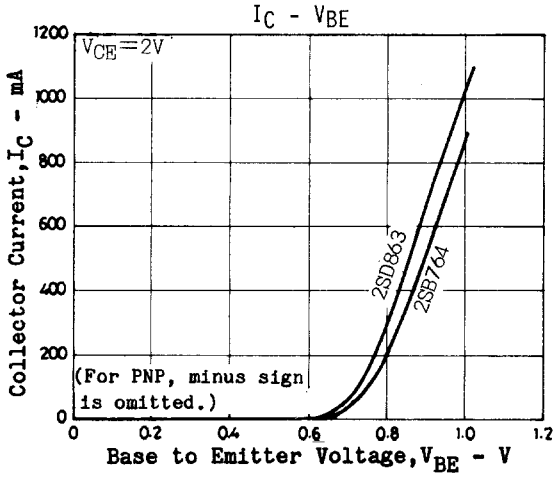
60 D 120	100 E 200	160 F 320

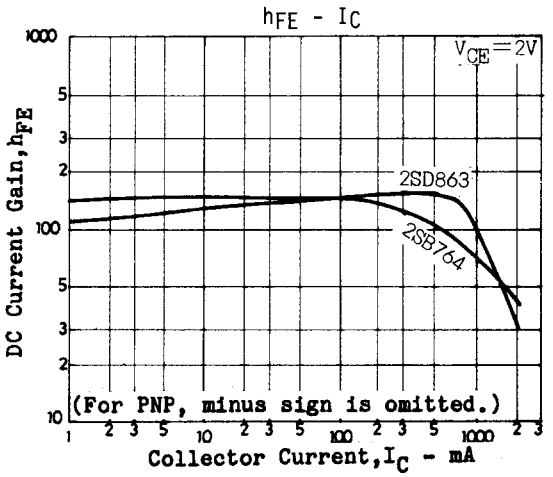




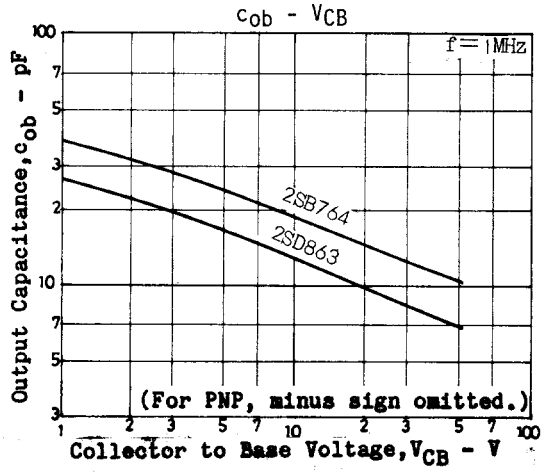




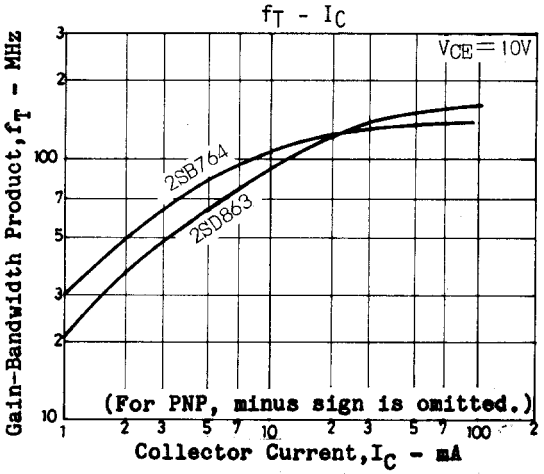




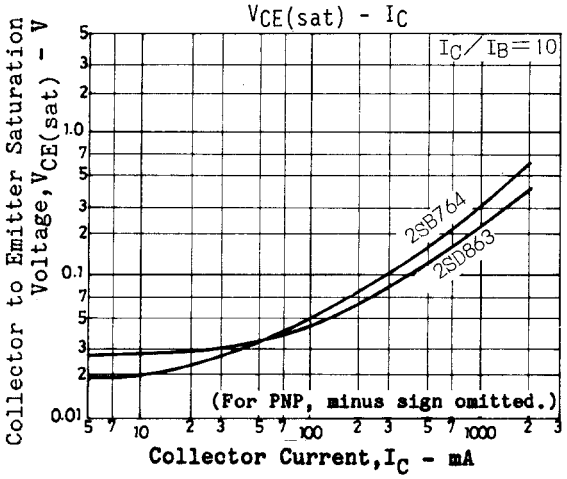
C_{ob} - V_{CB}



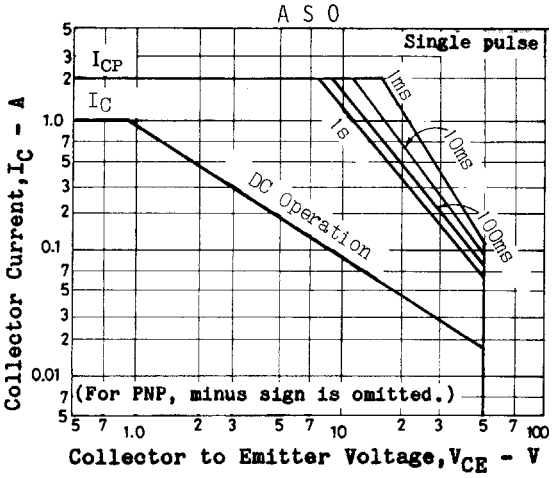
f_T - I_C



$V_{CE(sat)}$ - I_C



A S O



P_C - T_a