Ordering number:EN4136

NPN Epitaxial Planar Silicon Transistor

2SC4884

High-Definition CRT Display Video Output Applications

Applications

- High definition CRT display.
- Especially suited for use in color TV chrome output and high breakdown voltage driver applications.

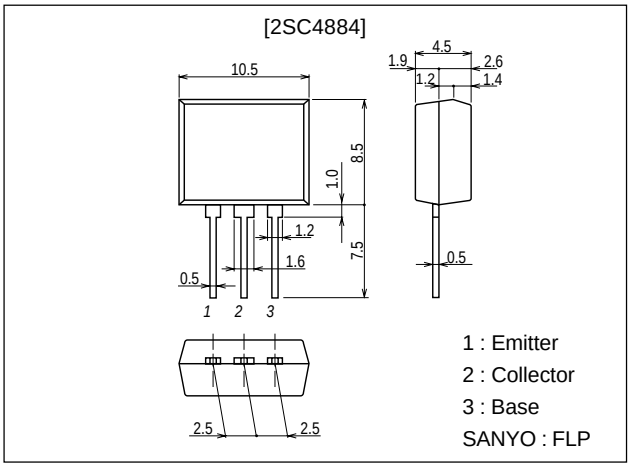
Features

- Adoption of MBIT process.
- Large allowable collector dissipation.
- High breakdown voltage (V_{CEO}≥300V).
- Excellent high frequency characteristic (C_{re}=1.8pF typ).
- Usage of radial taping to meet automatic mounting.

Package Dimensions

unit:mm

2084B



Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CBO}		300	V
Collector-to-Emitter Voltage	V_{CEO}		300	V
Emitter-to-Base Voltage	V_{EBO}		5	V
Collector Current	I_C		100	mA
Collector Current (Pulse)	I_{CP}		200	mA
Collector Dissipation	P_C		1.5	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}=200V, I_E=0			0.1	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=4V, I_C=0			0.1	μA
DC Current Gain	h_{FE}	V_{CE}=10V, I_C=10mA	60*		320*	
Gain-Bandwidth Product	f_T	V_{CE}=30V, I_C=10mA		70		MHz
Output Capacitance	C_{ob}	V_{CB}=30V, f=1MHz		2.6		pF
Reverse Transfer Capacitance	C_{re}	V_{CB}=30V, f=1MHz		1.8		pF

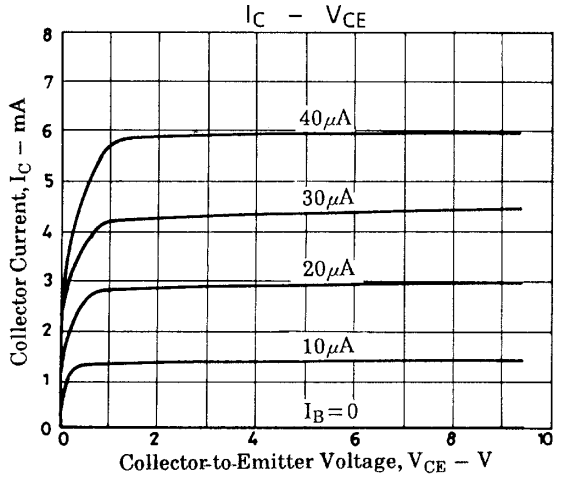
* : The 2SC4884 is classified by 10mA h_{FE} as follows :

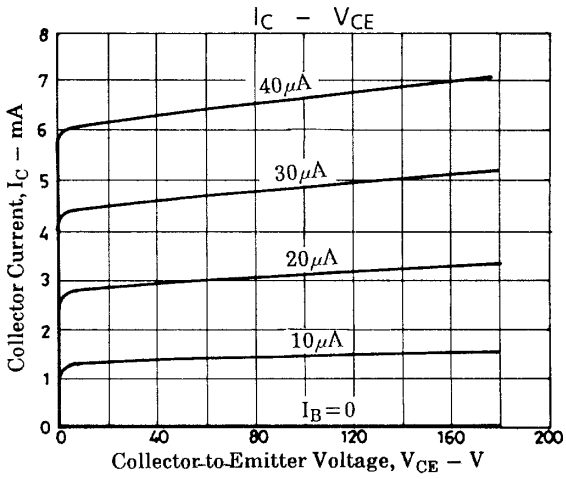
60	D	120	100	E	200	160	F	320

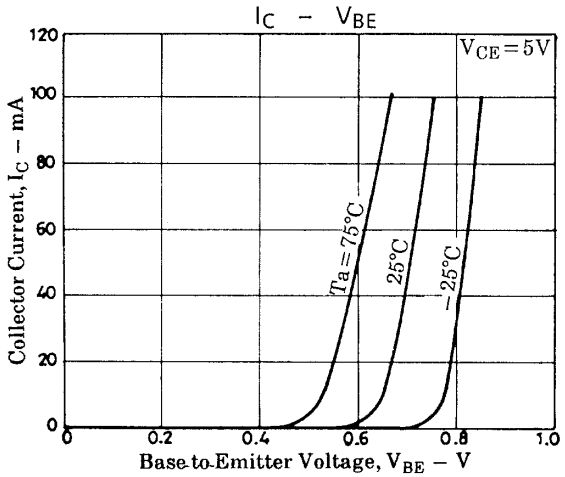
SANYO Electric Co.,Ltd. Semiconductor Bussiness Headquaters

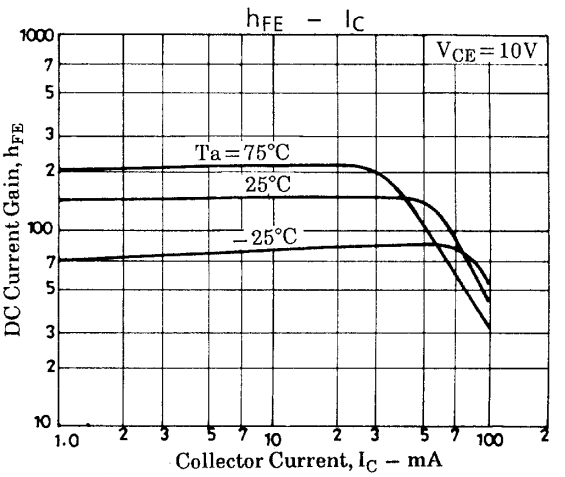
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

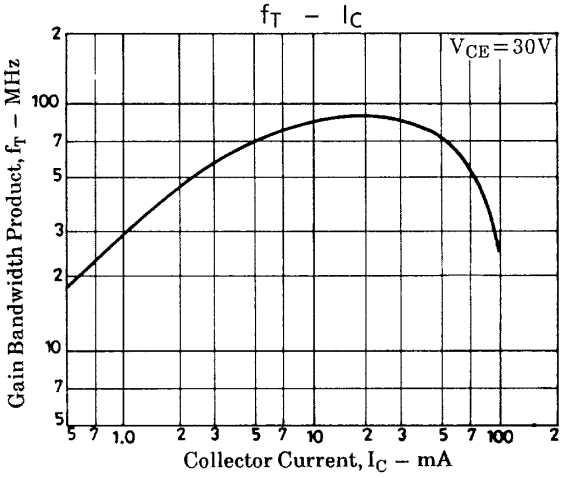
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=20mA, I_B=2mA			0.6	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=20mA, I_B=2mA			1.0	V
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	I_C=10μA, I_E=0	300			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=1mA, R_{BE}=∞	300			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=10μA, I_C=0	5			V

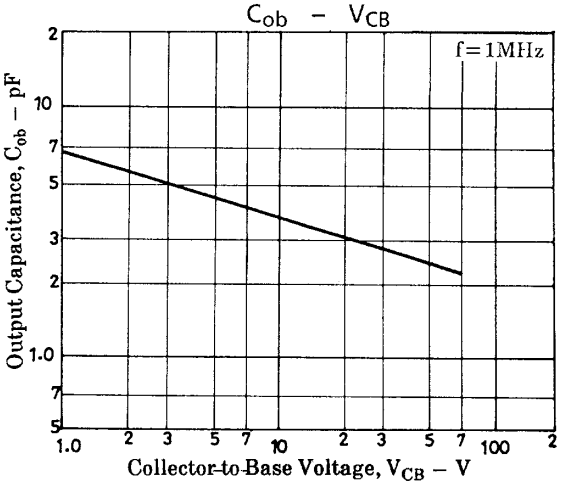


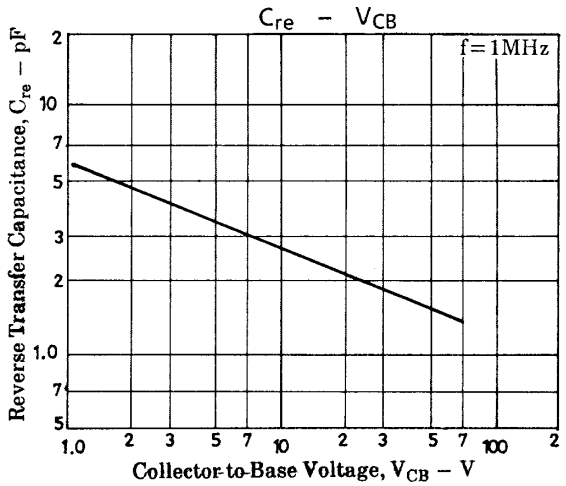


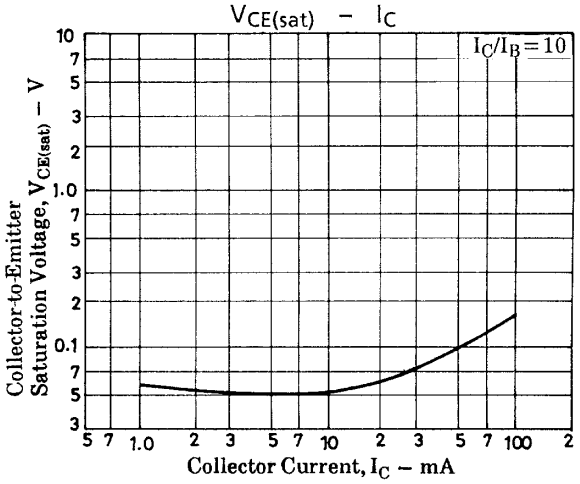


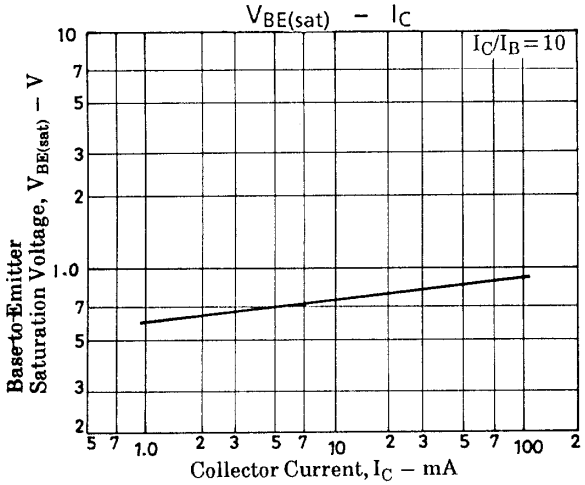


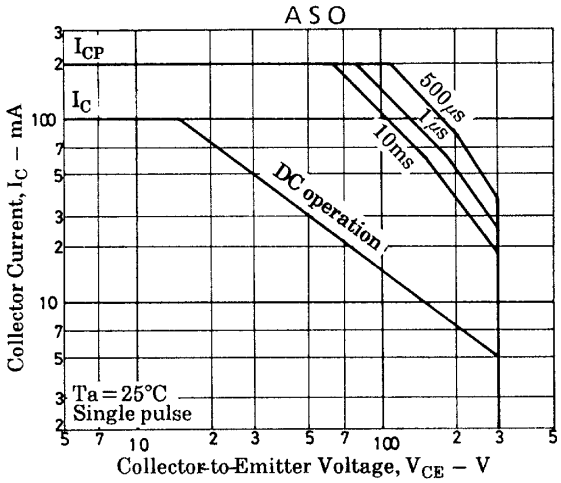


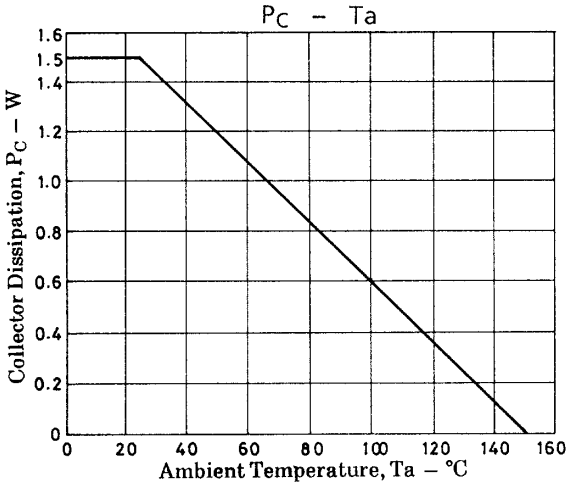



Cre – VCB
f=1MHz
Reverse Transfer Capacitance, Cre – pF
Collector-to-Base Voltage, VCB – V


VCE(sat) – IC
IC/IB=10
Collector-to-Emitter Saturation Voltage, VCE(sat) – V
Collector Current, IC – mA


VBE(sat) – IC
IC/IB=10
Base-to-Emitter Saturation Voltage, VBE(sat) – V
Collector Current, IC – mA


A S O
ICP
IC
500μs
1μs
10ms
DC operation
Ta=25°C
Single pulse
Collector Current, IC – mA
Collector-to-Emitter Voltage, VCE – V


PC – Ta
Collector Dissipation, PC – W
Ambient Temperature, Ta – °C