

2SC3595

**NPN Epitaxial Planar Silicon Transistor
Ultrahigh-Definition CRT Display
Video Output Applications**

Applications

- Ultrahigh-definition CRT display.
- Video output driver.
- Wideband amplifiers.

Features

- High f_T : $f_T \text{ typ} = 2.0\text{GHz}$.
- High current : $I_C = 500\text{mA}$.

Absolute Maximum Ratings at Ta=25°C

Absolute Maximum Ratings at Ta = 25°C			unit
Collector-to-Base Voltage	V _{CBO}	30	V
Collector-to-Emitter Voltage	V _{CEO}	20	V
Emitter-to-Base Voltage	V _{EBO}	3	V
Collector Current	I _C	500	mA
Collector Current (Pulse)	I _{CP}	1000	mA
Collector Dissipation	P _C	1.2	W
		5	W
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

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

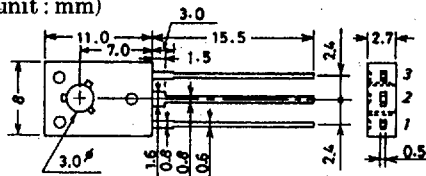
Electrical Characteristics at Ta=25°C			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=20V, I_E=0$			0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=2V$			5.0	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=5V, I_C=50mA$	40※		200※	
	$h_{FE(2)}$	$V_{CE}=5V, I_C=500mA$	20			
Gain-Bandwidth Product	f_T	$V_{CE}=5V, I_C=100mA$		2.0		GHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=300mA, I_B=30mA$		0.25	0.6	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=300mA, I_B=30mA$		0.92	1.2	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	30			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, R_{BE}=\infty$	20			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	3			V
Output Capacitance	C_{ob}	$V_{CB}=10V, f=1MHz$		6.0		pF
Reverse Transfer Capacitance	C_{re}	$V_{CB}=10V, f=1MHz$		4.6		pF

※ : The 2SC3595 is classified by 50mA h_{FE} as follows :

40	C	80	60	D	120	100	E	200
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Package Dimensions 2009B

(unit : mm)



1 : Emitter
2 : Collector
3 : Base

JEDEC : TO126

SANYO Electric Co., Ltd. Semiconductor Business Headquarters

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

80796TS (KOTO) 8-7237/4227KI/3145MY,TS No.1756-1/3

