PNP/NPN Epitaxial Planar Silicon Transistor

2SC3950



High-Definition CRT Display Video Output Applications

Applications

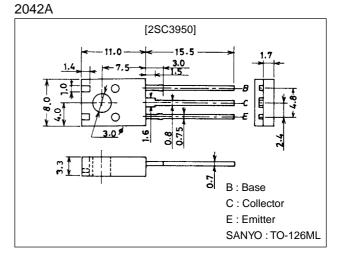
· High-definition CRT display video output, wide-band amplifier.

Features

- · High f_T : f_T =2.0GHz.
- · Large current capacity : $I_C=500$ mA.
- · Micaless type : TO-126 plastic package.

Package Dimensions

unit:mm



Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CBO}		30	V
Collector-to-Emitter Voltage	VCEO		20	V
Emitter-to-Base Voltage	VEBO		3	V
Collector Current	IC		500	mA
Collector Current (Pulse)	I _{CP}		1000	mA
Collector Dissipation	PC		1.3	W
		Tc=25°C	5	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

Electrical Characteristics at Ta = 25°C

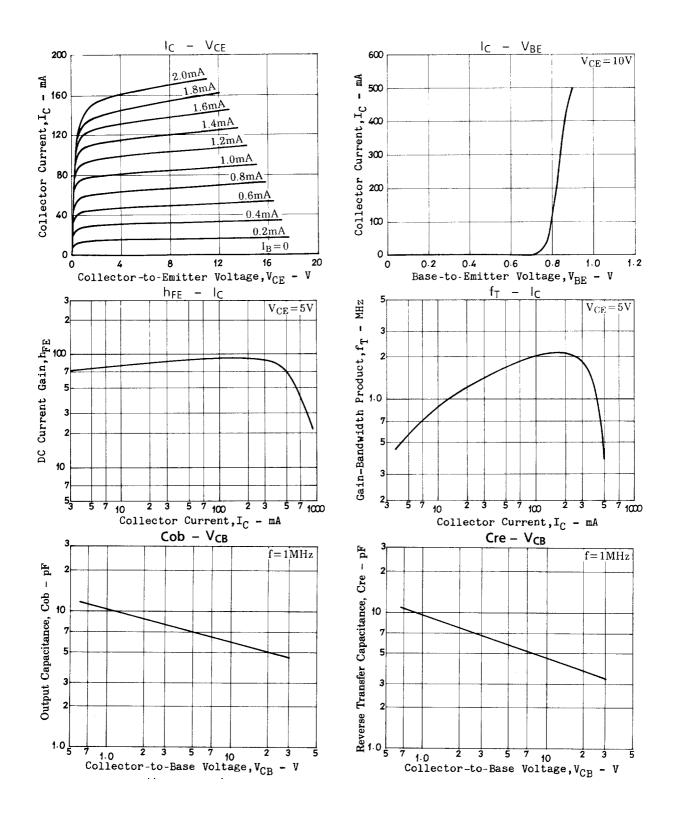
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I _{CBO}	V _{CB} =20V, I _E =0			0.1	μΑ
Emitter Cutoff Current	I _{EBO}	V _{EB} =2V, I _C =0			5.0	μA
DC Current Gain	h _{FE} 1	V _{CE} =5V, I _C =50mA	40*		200*	
	h _{FE} 2	V _{CE} =5V, I _C =500mA	20			
Gain-Bandwidth Product	fT	V _{CE} =5V, I _C =100mA		2.0		GHz
Output Capacitance	Cob	V _{CB} =10V, f=1MHz		6.0		pF
Reverse Transfer Capacitance	C _{re}	V _{CB} =10V, f=1MHz		4.6		pF
* h _{EE} 1 : The 2SC3950 is classified by 50mA h _{EE}	as follows :	40 C 80 60 D 120 100 E 200	7			

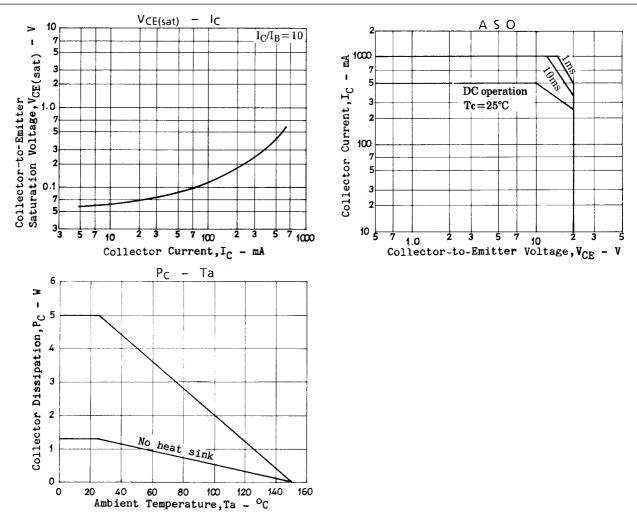
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Onit
Collector-to-Emitter Saturation Voltage	VCE(sat)	I _C =300mA, I _B =30mA		0.3	0.8	V
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =300mA, I _B =30mA		0.9	1.2	V





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