

2SC3504

High-Definition CRT Display, Video Output Applications

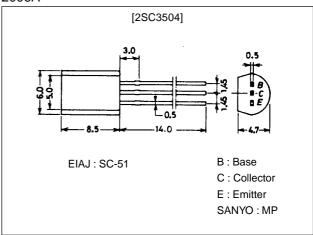
Features

- · High f_T.
- \cdot Small reverse transfer capacitance.

Package Dimensions

unit:mm

2006A



Specifications

Absolute Maximum Ratings at Ta = 25°C

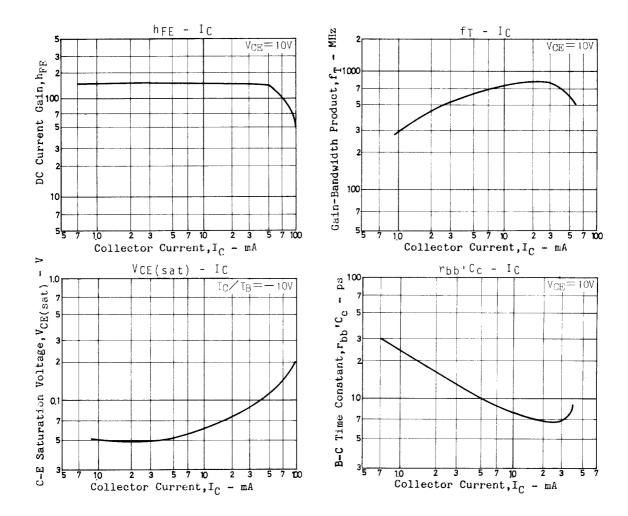
Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CBO}		70	V
Collector-to-Emitter Voltage	VCEO		60	V
Emitter-to-Base Voltage	V _{EBO}		4	V
Collector Current	IC		50	mA
Collector Current (Pulse)	I _{CP}		100	mA
Collector Dissipation	PC		900	mW
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
	Symbol		min	typ	max	Offic
Collector Cutoff Current	ICBO	V _{CB} =40V, I _E =0			0.1	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} =3V, I _C =0			1.0	μA
DC Current Gain	hFE	V _{CE} =10V, I _C =10mA	60*		320*	
Gain-Bandwidth Product	f _T	V _{CE} =10V, I _C =10mA	300	500		MHz
Base-to-Collector Time Constant	r _{bb} 'C _c	V _{CE} =10V, I _C =10mA		8	20	ps
Reverse Transfer Capacitance	Cre	V _{CB} =10V, f=1MHz		1.0	1.6	pF
Collector-to-Emitter Saturation Voltage	VCE(sat)	I _C =20mA, I _B =2mA			0.5	V
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =20mA, I _B =2mA			1.0	V

- *: The 2SC3504 is classified by 10mA h_{FE} as follows: 60 D 120 100 E 200 160 F 3.
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Onit
Collector-to-Base Breakdown Voltage	V(BR)CBO	I _C =10μA, I _E =0	70			V
Collector-to-Emitter Breakdown Voltage	V(BR)CEO	I _C =1mA, R _{BE} =∞	60			V
Emitter-to-Base Breakdown Voltage	V(BR)EBO	I _E =10μA, I _C =0	4			V



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