

2SC4124

Ultrahigh-Definition CRT Display Horizontal Deflection Output Applications

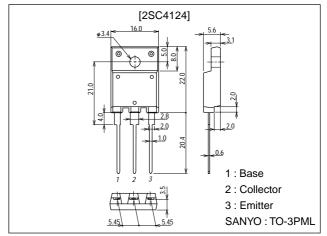
Features

- · Adoption of MBIT process.
- · On-chip damper diode.
- · High breakdown voltage (V_{CBO}=1500V).
- · High speed ($t_f=100$ ns typ).
- \cdot High reliability (Adoption of HVP process).

Package Dimensions

unit:mm

2039D



Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CBO}		1500	V
Collector-to-Emitter Voltage	V _{CEO}		800	V
Emitter-to-Base Voltage	V _{EBO}		6	V
Collector Current	IC		8	Α
Collector Current (Pulse)	I _{CP}		25	Α
Collector Dissipation	PC		3	W
		Tc=25°C	70	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

Electrical Characteristics at Ta = 25°C

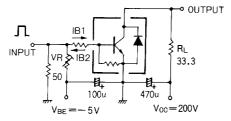
Parameter	Symbol	Conditions	Ratings			Unit
	Symbol		min	typ	max	Offic
Collector Cutoff Current	ICBO	V _{CB} =800V, I _E =0			10	μΑ
	ICES	V _{CE} =1500V, R _{BE} =0			1	mA
Collector-to-Emitter Sastain Voltage	VCEO(sus)	I _C =100mA, I _B =0	800			V
Emitter Cutoff Current	I _{EBO}	V _{EB} =4V, I _C =0	40		130	mA
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	I _C =6A, I _B =1.5A			5	V
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =6A, I _B =1.5A			1.5	V

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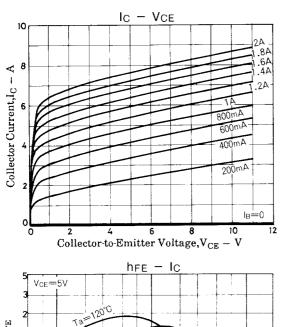
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
DC Current Gain	h _{FE} 1	V _{CE} =5V, I _C =1A	8			
	h _{FE} 2	V _{CE} =5V, I _C =6A	4		6	
Diode Forward Voltage	٧ _F	I _{EC} =8A			2	V
Storage Time	t _{stg}	I _C =6A, I _{B1} =1.2A, I _{B2} =-2.4A			3	μs
Fall Time	t _f	I _C =6A, I _{B1} =1.2A, I _{B2} =-2.4A		0.1	0.2	μs

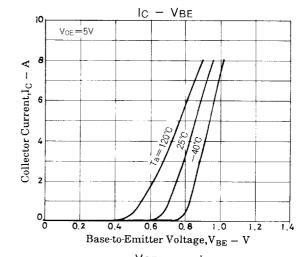
Switching Time Test Circuit

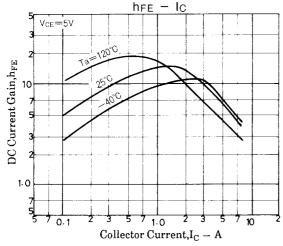


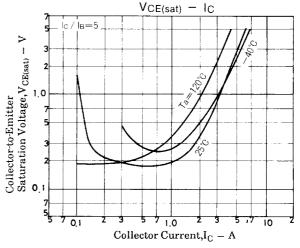


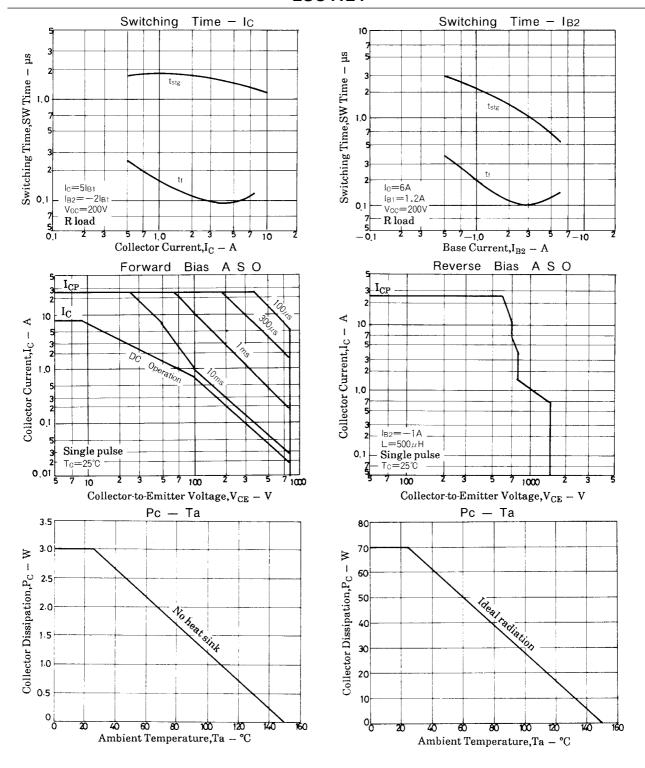
Unit (resistance : Ω , capacitance : F)











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