

2SC4440

# **Ultrahigh-Definition Monochrome Display Horizontal Deflection Output Applications**

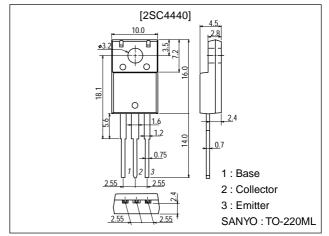
#### **Features**

- · High reliability (Adoption of HVP process).
- · Fast switching speed.
- · High brocking voltage.
- · Wide ASO.
- · Adoption of MBIT process.
- · Micaless package facilitating easy mounting.

# **Package Dimensions**

unit:mm

2041A



# **Specifications**

### Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V <sub>CBO</sub>		600	V
Collector-to-Emitter Voltage	VCEO		400	V
Emitter-to-Base Voltage	VEBO		7	V
Collector Current	IC		7	Α
Collector Current (Pulse)	I <sub>CP</sub>	PW≤300μs, duty cycle≤10%	14	Α
Collector Dissipation	PC		2.0	W
		Tc=25°C	30	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

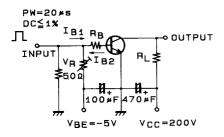
#### Electrical Characteristics at Ta = 25°C

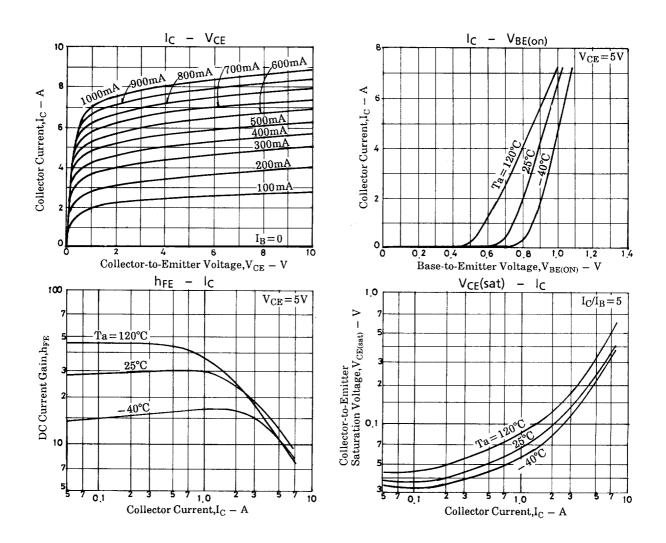
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I <sub>CBO</sub>	V <sub>CB</sub> =400V, I <sub>E</sub> =0			10	μΑ
	ICES	V <sub>CE</sub> =600V			0.5	mA
Collector-to-Emitter Sastain Voltage	V <sub>CEO(sus)</sub>	I <sub>C</sub> =100mA, I <sub>B</sub> =0	400			V
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> =5V, I <sub>C</sub> =0			1	mA
Collector-to-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =4A, I <sub>B</sub> =0.8A			0.8	V
Base-to-Emitter Saturation Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =4A, I <sub>B</sub> =0.8A			1.5	V

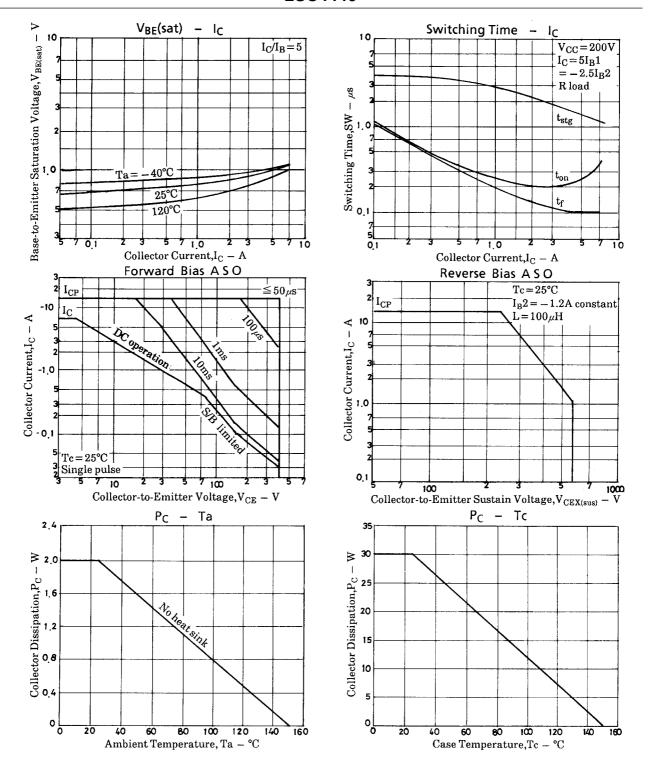
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
DC Current Gain	h <sub>FE</sub> 1	V <sub>CE</sub> =5V, I <sub>C</sub> =0.8A	15			
	h <sub>FE</sub> 2	V <sub>CE</sub> =5V, I <sub>C</sub> =4A	10		20	
Gain-Bandwidth Product	fT	V <sub>CE</sub> =10V, I <sub>C</sub> =0.8A		20		MHz
Storage Time	t <sub>stg</sub>	I <sub>C</sub> =5A, I <sub>B</sub> 1=1A, I <sub>B</sub> 2=-2A, R <sub>L</sub> =40Ω, V <sub>CC</sub> =200V			3.0	μs
Fall Time	t <sub>f</sub>	I <sub>C</sub> =5A, I <sub>B</sub> 1=1A, I <sub>B</sub> 2=-2A, R <sub>L</sub> =40Ω, V <sub>CC</sub> =200V			0.2	μs

## **Switching Time Test Circuit**







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