

# SANYO Semiconductors DATA SHEET

# 2SC6117 — Color TV Horizontal Deflection Output Applications

#### **Features**

- · High speed.
- High breakdown voltage (VCBO=1500V).
- · High reliability (Adoption of HVP process).
- · Adoption of MBIT process.
- · On-chip damper diode.

### **Specifications**

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

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	VCBO		1500	V
Collector-to-Emitter Voltage	VCEO		800	V
Emitter-to-Base Voltage	VEBO		6	V
Collector Current	IC		8	Α
Collector Current (Pulse)	ICP		20	Α
Collector Dissipation	D-		3.0	W
	PC	Tc=25°C	65	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

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

Parameter	Symbol	Conditions		Ratings		
	Symbol		min	typ	max	Unit
Collector Cutoff Current	ICBO	VCB=800V, IE=0A			10	μΑ
Collector Cutoff Current	ICES	V <sub>CE</sub> =1500V, R <sub>BE</sub> =0Ω			1.0	mA
Collector Sustain Voltage	VCEO(sus)	I <sub>C</sub> =100mA, I <sub>B</sub> =0A	800			V
Emitter Cutoff Current	IEBO	VEB=4V, IC=0A	40		130	mA

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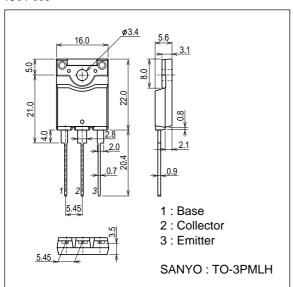
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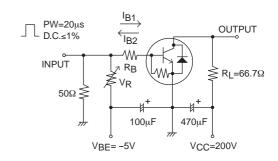
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Collector-to-Emitter Saturation Voltage	VCE(sat)	IC=4.5A, IB=0.9A			2	V
Base-to-Emitter Saturation Voltage	V <sub>BE</sub> (sat)	I <sub>C</sub> =4.5A, I <sub>B</sub> =0.9A			1.5	V
DC Current Gain	hFE1	VCE=5V, IC=1A	10			
	hFE2	VCE=5V, IC=5A	5.3		7.5	
Diode Forward Voltage	٧F	I <sub>EC</sub> =7A			2	V
Fall Time	tf	IC=3A, IB1=0.6A, IB2=-1.2A			0.2	μS

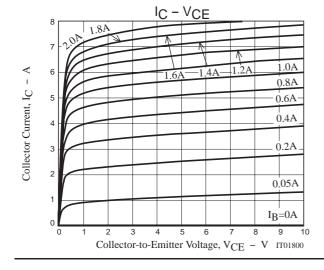
## **Package Dimensions**

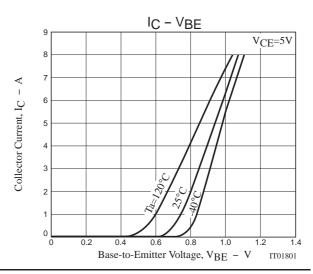
unit : mm (typ) 7504-001

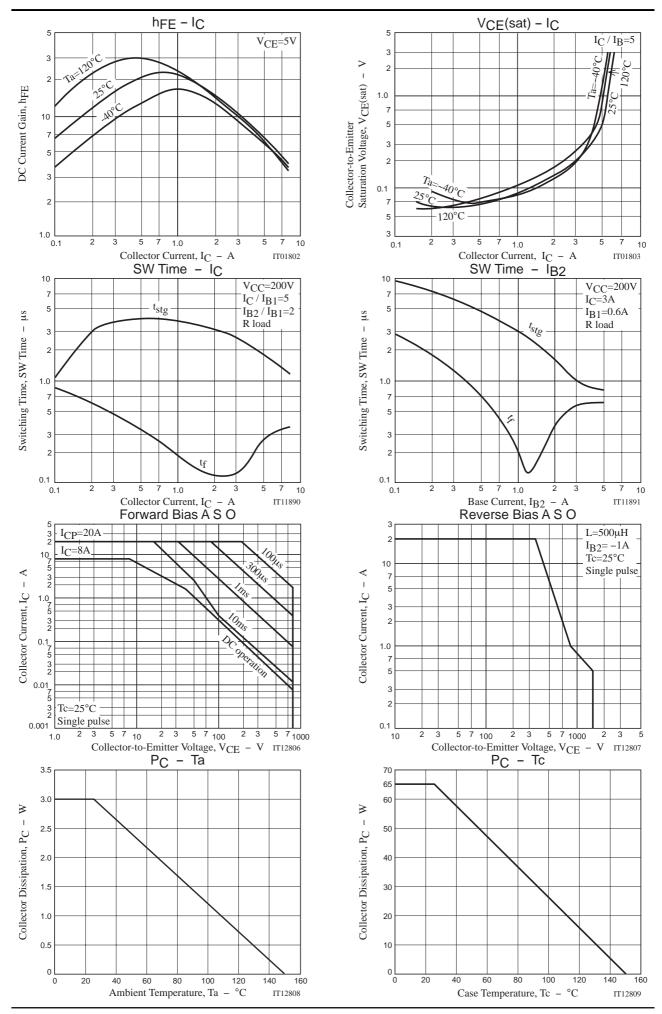


# **Switching Time Test Circuit**









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