

**2SD1885****Color TV Horizontal Deflection  
Output Applications****Applications**

- Color TV horizontal deflection output.
- Color display horizontal deflection output.

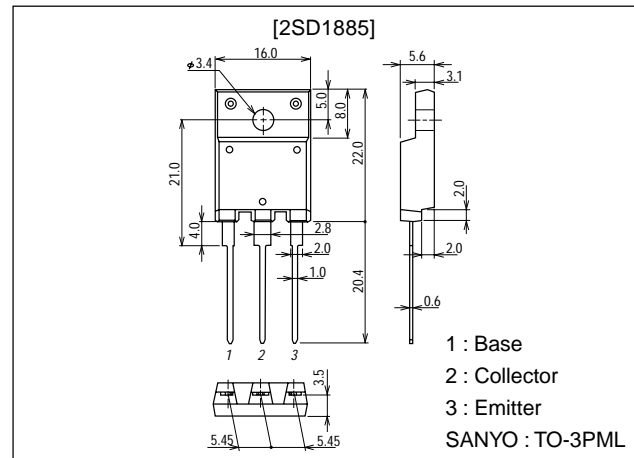
**Features**

- High speed ( $t_f=100\text{ns}$ ).
- High breakdown voltage ( $V_{CBO}=1500\text{V}$ ).
- High reliability (Adoption of HVP process).

**Package Dimensions**

unit:mm

2039D

**Specifications****Absolute Maximum Ratings at  $T_a = 25^\circ\text{C}$** 

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	$I_C$		6	A
Collector Current (Pulse)	$I_{CP}$		20	A
Collector Dissipation	$P_C$		3.0	W
		$T_c=25^\circ\text{C}$	60	W
Junction Temperature	$T_j$		150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$		-55 to +150	$^\circ\text{C}$

**Electrical Characteristics at  $T_a = 25^\circ\text{C}$** 

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	$I_{CES}$	$V_{CE}=1500\text{V}$			1.0	mA
	$I_{CBO}$	$V_{CB}=800\text{V}, I_E=0$			10	$\mu\text{A}$
Collector-to-Emitter Sustain Voltage	$V_{CEO(sus)}$	$I_C=100\text{mA}, I_B=0$	800			V
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=4\text{V}, I_C=0$			1.0	mA
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=5\text{A}, I_B=1.0\text{A}$			5	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=5\text{A}, I_B=1.0\text{A}$			1.5	V
DC Current Gain	$h_{FE1}$	$V_{CE}=5\text{V}, I_C=1\text{A}$	8			
	$h_{FE2}$	$V_{CE}=5\text{V}, I_C=5\text{A}$	5		10	
Fall Time	$t_f$	$I_C=4\text{A}, I_{B1}=0.8\text{A}, I_{B2}=-1.6\text{A}$		0.1	0.3	$\mu\text{s}$

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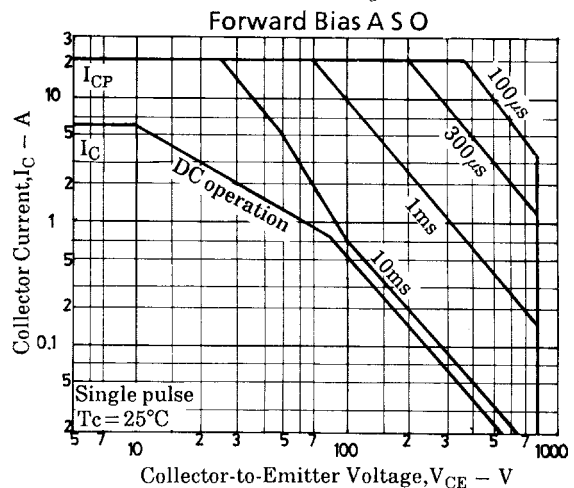
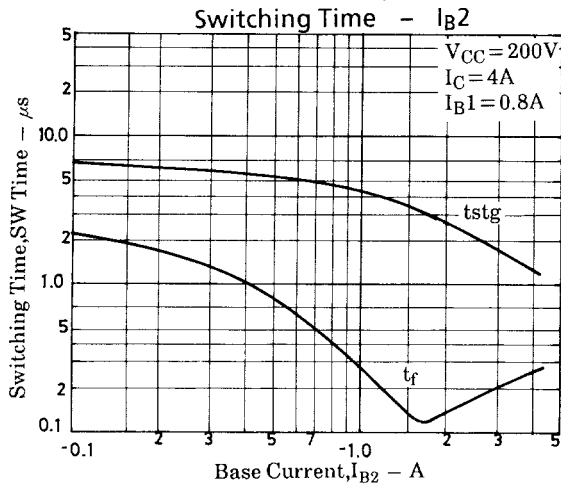
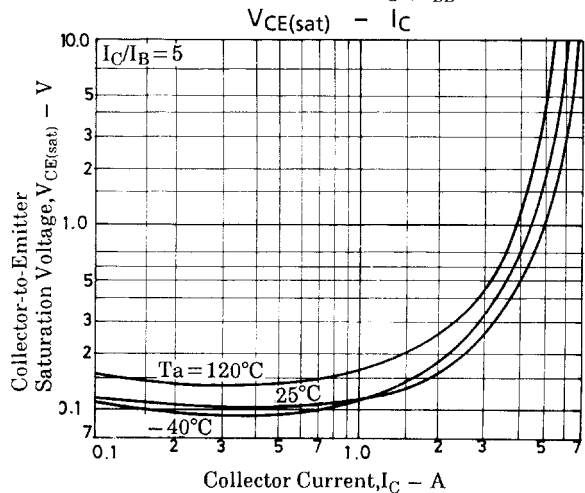
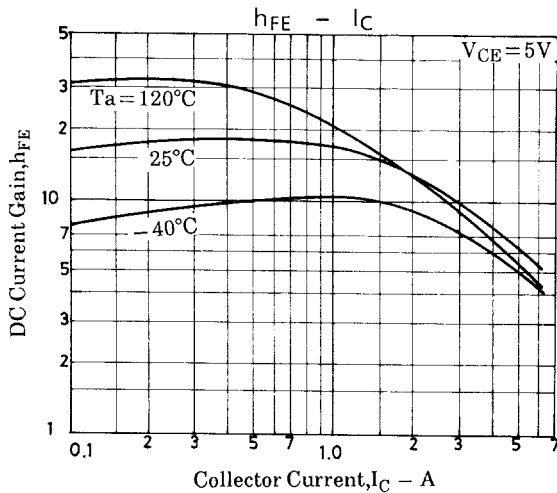
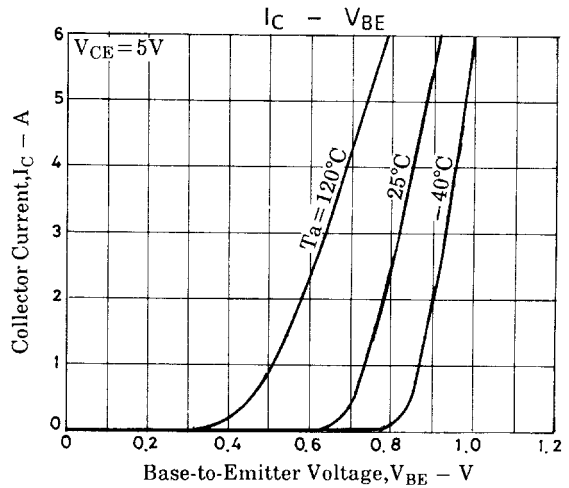
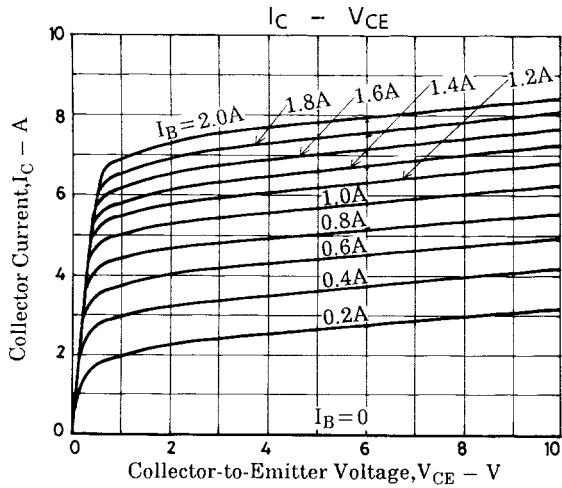
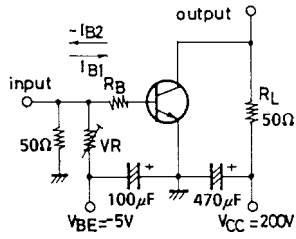
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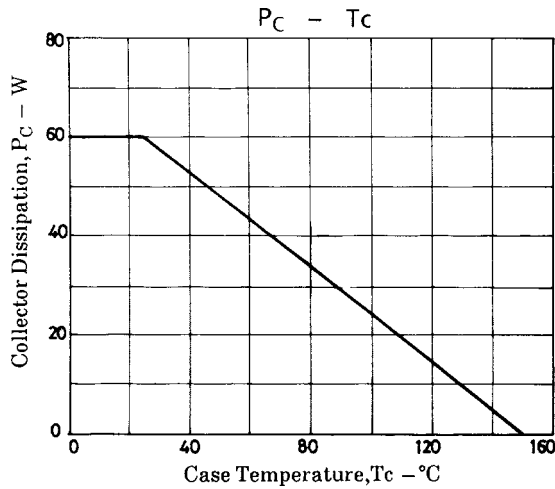
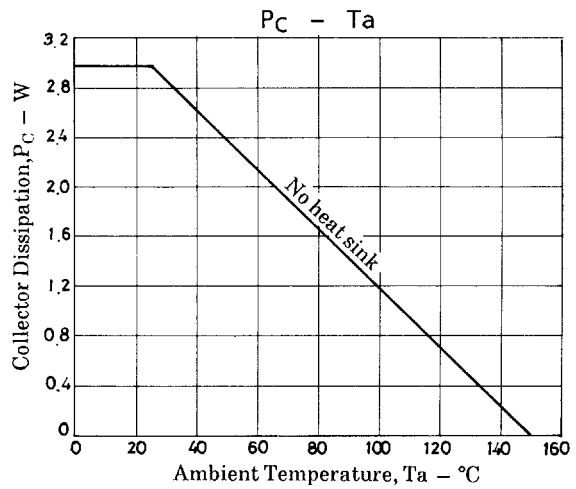
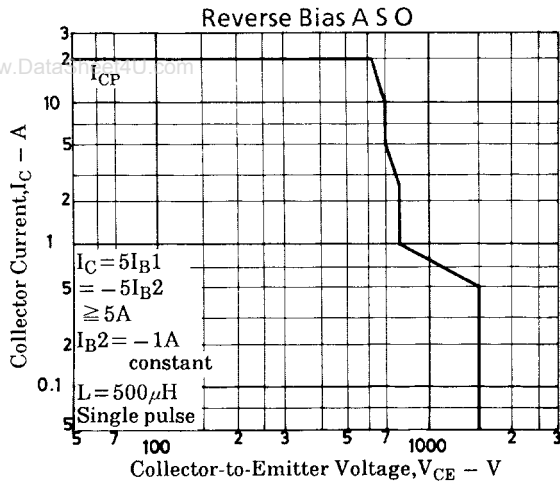
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Switching Time Test Circuit

$PW = 20\mu s$ ,  $duty \leq 1\%$



# 2SD1885



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