

<b>SANYO</b>	No.4138	<b>2SC4891</b>
	NPN Triple Diffused Planar Silicon Transistor Very High-Definition CRT Display Horizontal Deflection Output Applications	

**Features**

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

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

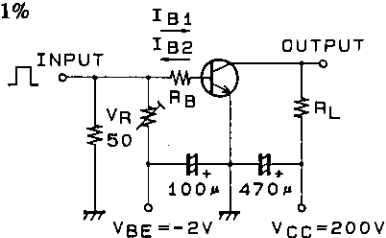
Collector-to-Base Voltage	$V_{CBO}$	1500	V	
Collector-to-Emitter Voltage	$V_{CEO}$	800	V	
Emitter-to-Base Voltage	$V_{EBO}$	6	V	
Collector Current	$I_C$	15	A	
Peak Collector Current	$i_{cp}$	35	A	
Collector Dissipation	$P_C$	3.0	W	
		$T_c = 25^\circ\text{C}$	75	W
Junction Temperature	$T_j$	150	$^\circ\text{C}$	
Storage Temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$	

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

			min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=800\text{V}, I_E=0$			10	$\mu\text{A}$
Collector Cutoff Current	$I_{CES}$	$V_{CE}=1500\text{V}, R_{BE}=0$			1.0	mA
Collector 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
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=12\text{A}, I_B=3.0\text{A}$			5	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=12\text{A}, I_B=3.0\text{A}$			1.5	V
DC Current Gain	$h_{FE(1)}$	$V_{CE}=5\text{V}, I_C=1.0\text{A}$	8		30	
	$h_{FE(2)}$	$V_{CE}=5\text{V}, I_C=12\text{A}$	4		8	
Storage Time	$t_{stg}$	$I_C=8\text{A}, I_{B1}=1.6\text{A}, I_{B2}=-3.2\text{A}$			3.0	$\mu\text{s}$
Fall Time	$t_f$	$I_C=8\text{A}, I_{B1}=1.6\text{A}, I_{B2}=-3.2\text{A}$			0.2	$\mu\text{s}$

**Switching Time Test Circuit**

$PW=20\mu\text{s}$   
 $DC \leq 1\%$

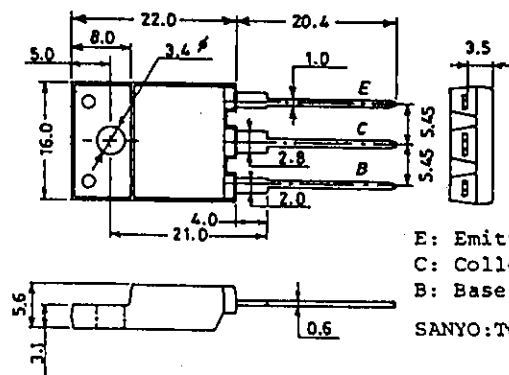


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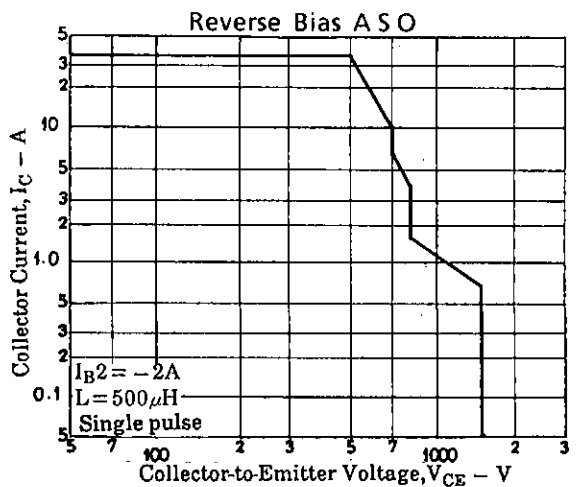
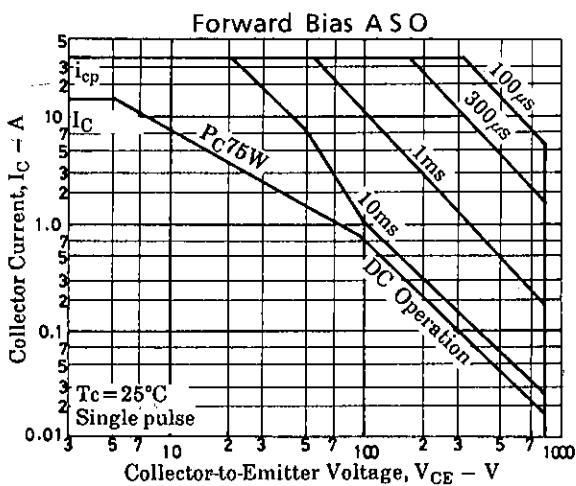
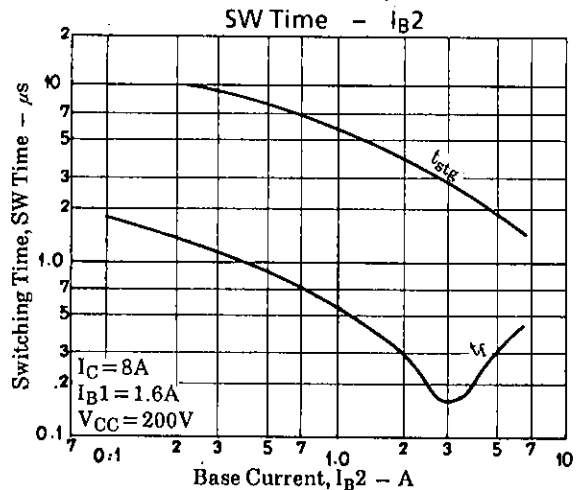
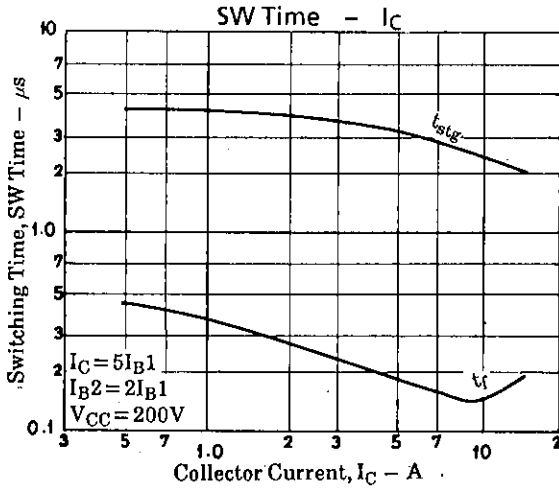
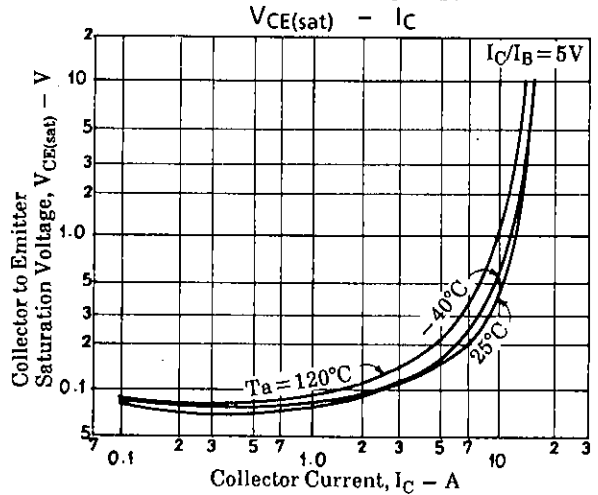
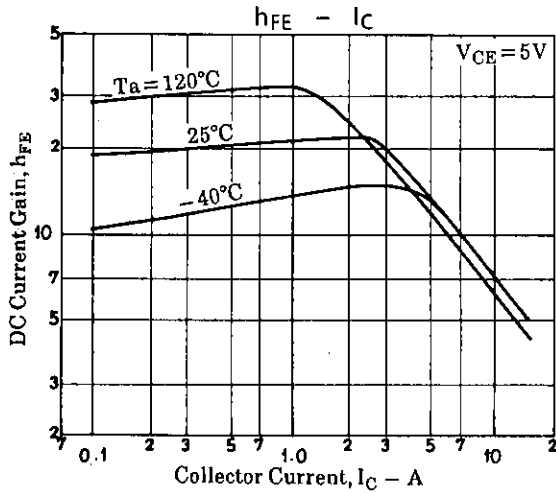
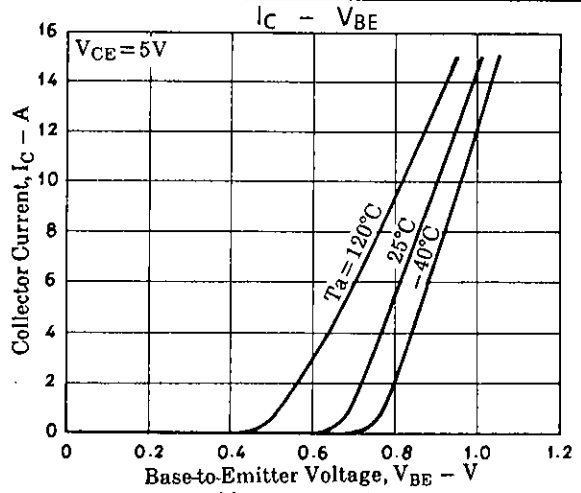
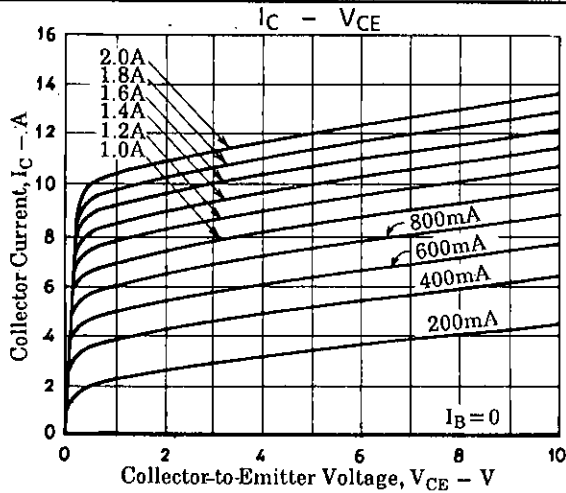
Unit (resistance: $\Omega$ , capacitance:F)

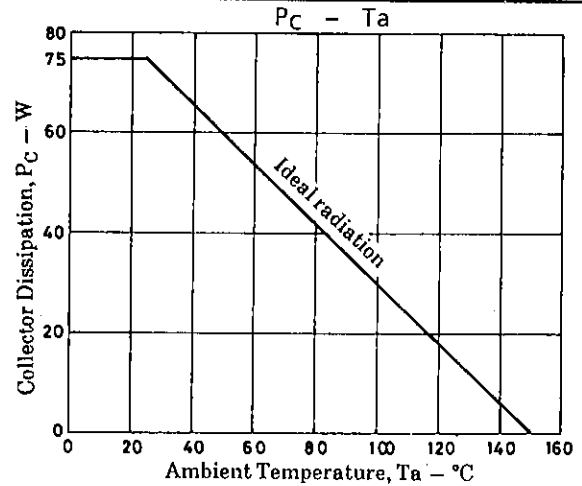
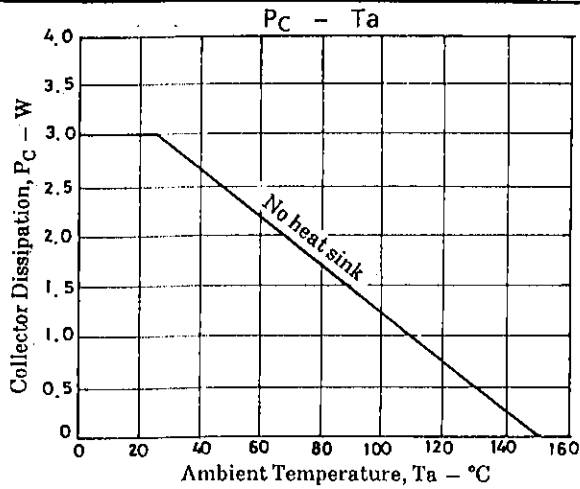
**Package Dimensions 2039A**

(unit: mm)



E: Emitter  
 C: Collector  
 B: Base  
 SANYO:TO3PML





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