

Ordering number: EN3666A

<b>SANYO</b>	No.3666A	2SC4770
	NPN Triple Diffused Planar Silicon Transistor <b>Ultrahigh-Definition Color Display                  Horizontal Deflection Output Applications</b>	

**Features**

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

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

			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	$I_C$	7	A
Collector Current (Pulse)	$I_{CP}$	16	A
Collector Dissipation	$P_C$	3	W
		$T_c=25^\circ\text{C}$	60
Junction Temperature	$T_j$		150
Storage Temperature	$T_{stg}$		-55 to +150
			$^\circ\text{C}$

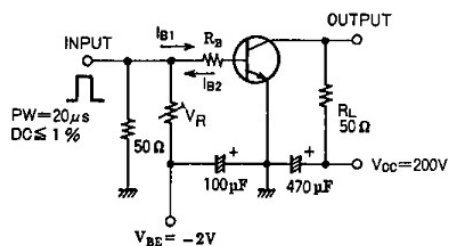
**Electrical Characteristics at  $T_a=25^\circ\text{C}$**

			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	$V_{CE(sat)}$	$I_C=5\text{A}, I_B=1.7\text{A}$			5	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=5\text{A}, I_B=1.7\text{A}$			1.5	V
DC Current Gain	$h_{FE(1)}$	$V_{CE}=5\text{V}, I_C=1.0\text{A}$		8		
	$h_{FE(2)}$	$V_{CE}=5\text{V}, I_C=5\text{A}$	3.0*		8.0*	
Storage Time	$t_{stg}$	$I_C=4\text{A}, I_{B1}=0.8\text{A}$			3.0	$\mu\text{s}$
Fall Time	$t_f$	$I_{B2}=-1.6\text{A}$		0.1	0.2	$\mu\text{s}$

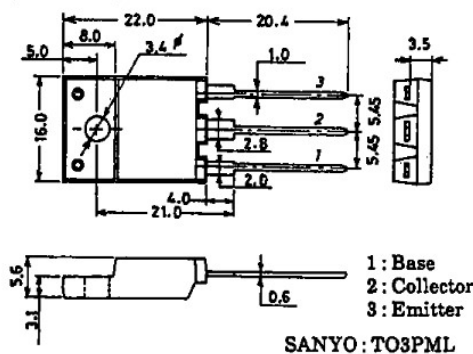
\* : The 2SC4770 is classified by 5A  $h_{FE}$  as follows :

$h_{FE}$	3 to 5	4 to 6	5 to 8
Rank	1	2	3

**Switching Time Test Circuit**



**Package Dimensions 2039C (unit : mm)**

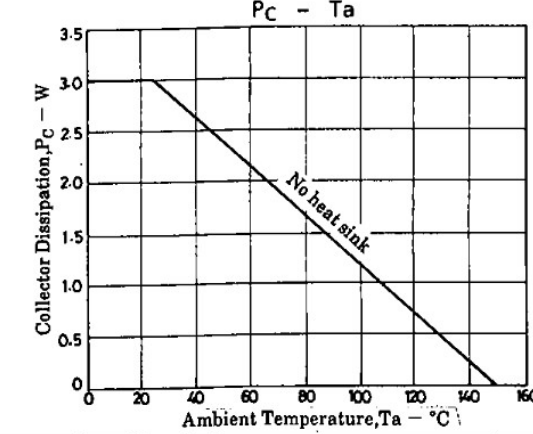
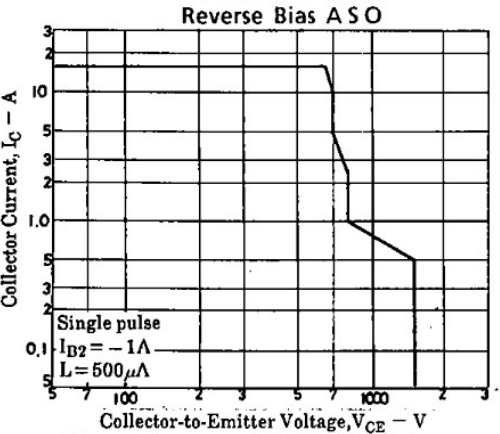
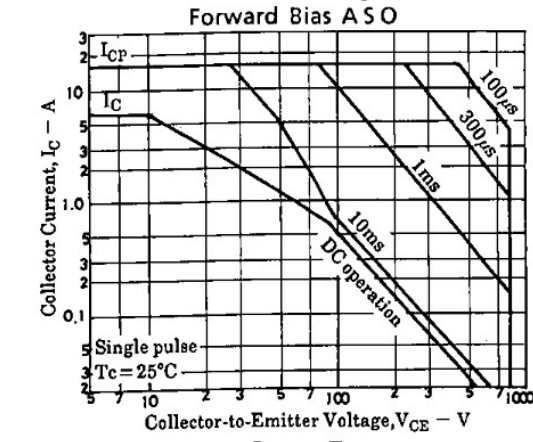
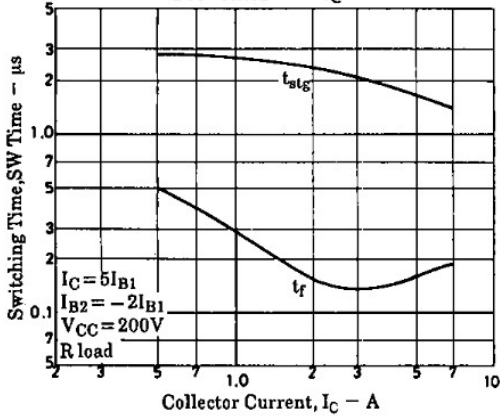
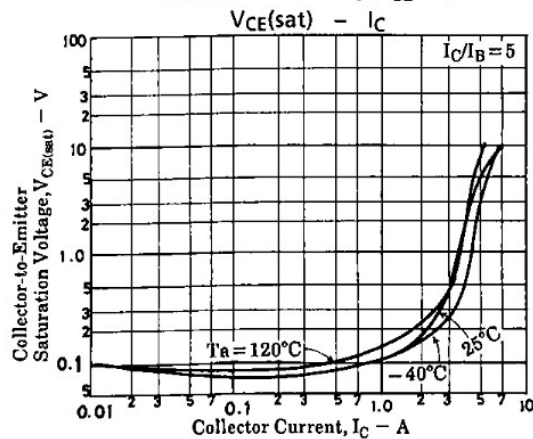
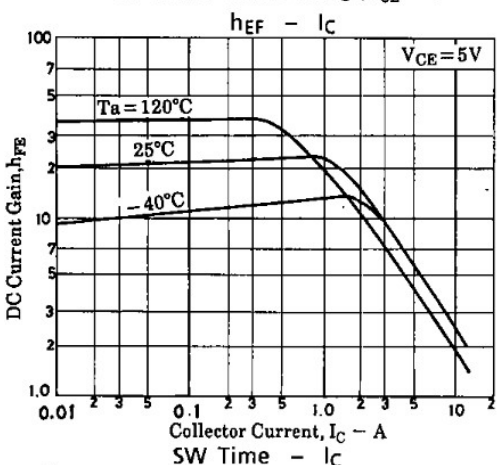
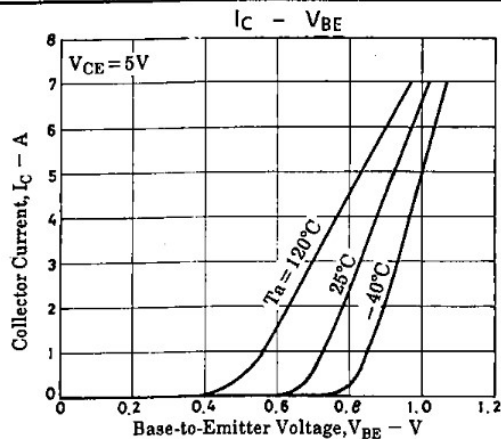
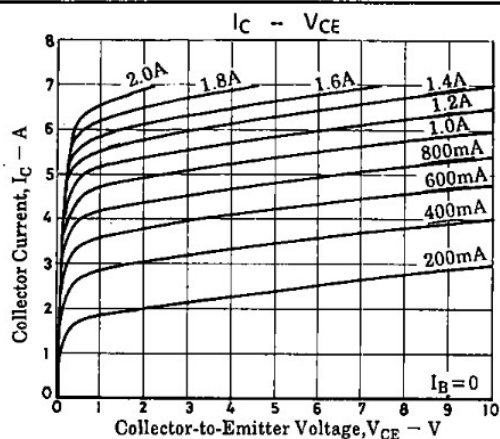


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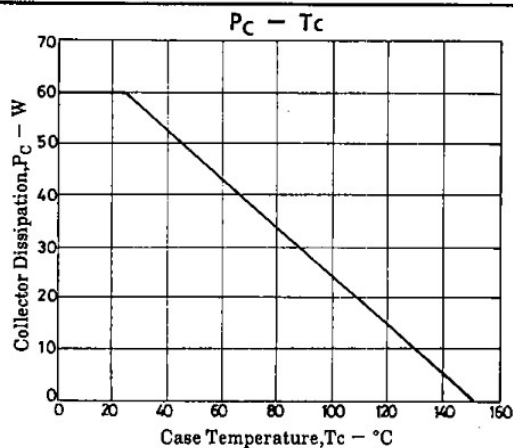


2SC4770





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