

SANYO	No.3271	<h1 style="margin: 0;">HPA72R</h1> <p style="margin: 0;">NPN Triple Diffused Planar Silicon Composite Transistor</p> <p style="margin: 0;">Very High-Definition Color Display, Horizontal Deflection Output Applications</p>
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Features

- High speed
- High breakdown voltage
- High-speed damper diode placed in one package
- Adoption of MBIT process
- High reliability
- Micaless package facilitating easy mounting

Absolute Maximum Ratings at Ta = 25°C

			unit
Collector-to-Base Voltage	V _{CB0}	1500	V
Collector-to-Emitter Voltage	V _{CEO}	800	V
Emitter-to-Base Voltage	V _{EBO}	6	V
Collector Current	I _C	7	A
Peak Collector Current	i _{cp}	16	A
Diode Forward Current	I _o	4	A
Peak Diode Forward Current	i _{op}	PW ≤ 100μs, duty ≤ 50%	7 A
Total Power Dissipation	P _T	T _c = 25°C	60 W
		T _a = 25°C	3 W
Junction Temperature	T _j		150 °C
Storage Temperature	T _{stg}		-55 to +150 °C

Electrical Characteristics at Ta = 25°C

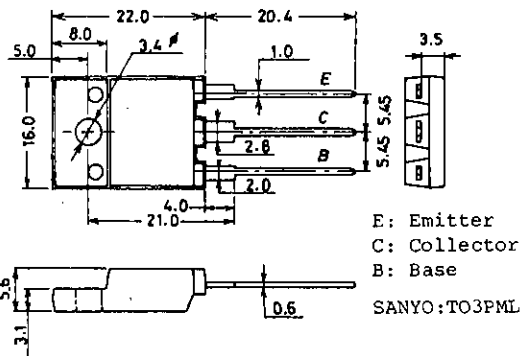
			min	typ	max	unit
Collector Cutoff Current	I _{CB0}	V _{CB} = 1500V, I _E = 0			5	mA
Collector Sustain Voltage	V _{CEO(sus)}	I _C = 100mA, I _B = 0	800			V
Emitter Cutoff Current	I _{EBO}	V _{EB} = 4V, I _C = 0			1.0	mA
DC Current Gain	h _{FE} (1)	V _{CE} = 5V, I _C = 1A	8			
		V _{CE} = 5V, I _C = 4A	4※		10※	
C-E Saturation Voltage	V _{CE(sat)}	I _C = 4A, I _B = 1A			5	V
B-E Saturation Voltage	V _{BE(sat)}	I _C = 4A, I _B = 1A			1.5	V
Storage Time	t _{stg}	I _C = 4A, I _{B1} = 0.8A, I _{B2} = -1.6A			3	μs
Fall Time	t _f	I _C = 4A, I _{B1} = 0.8A, I _{B2} = -1.6A		0.1	0.2	μs

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※: The HPA72R is classified by 4A h_{FE} as follows:

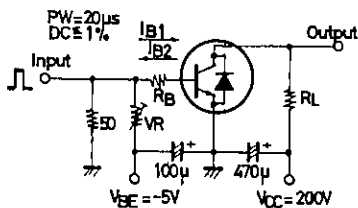
4	2	6	5	3	8	7	4	10
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Package Dimensions
(unit: mm) 2039



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

Switching Time Test Circuit

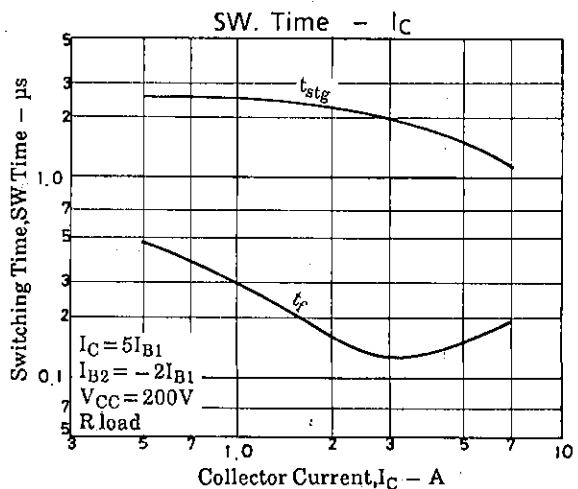
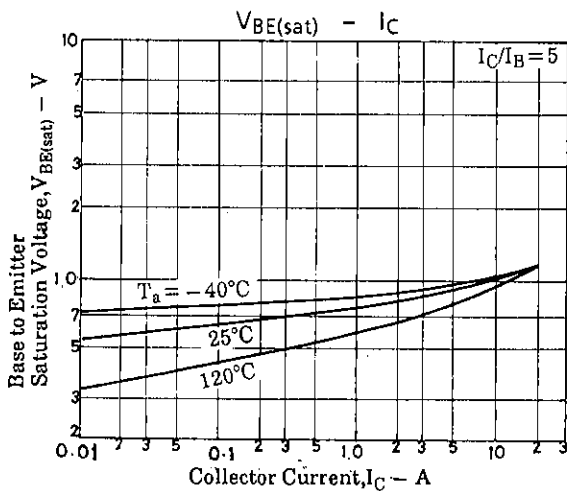
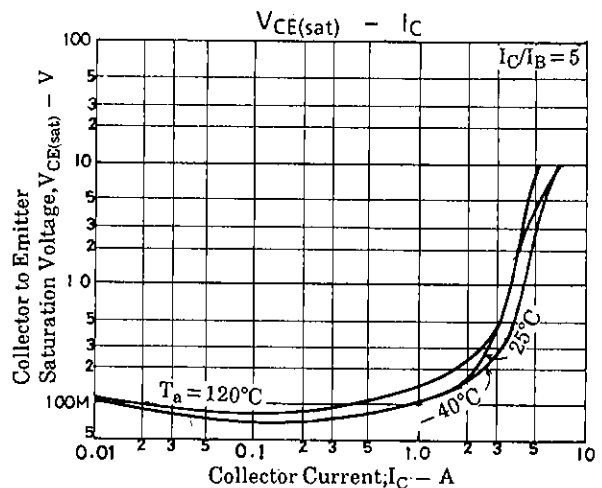
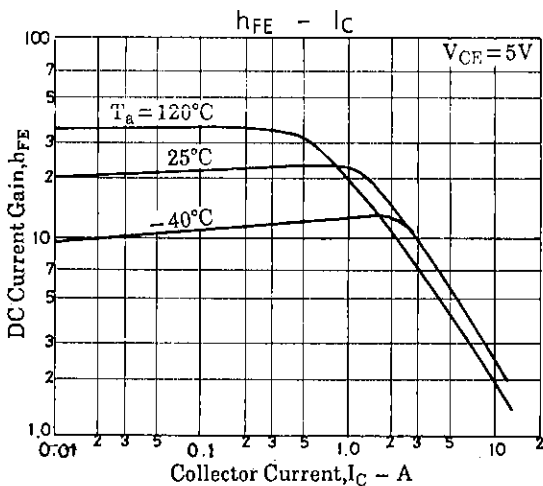
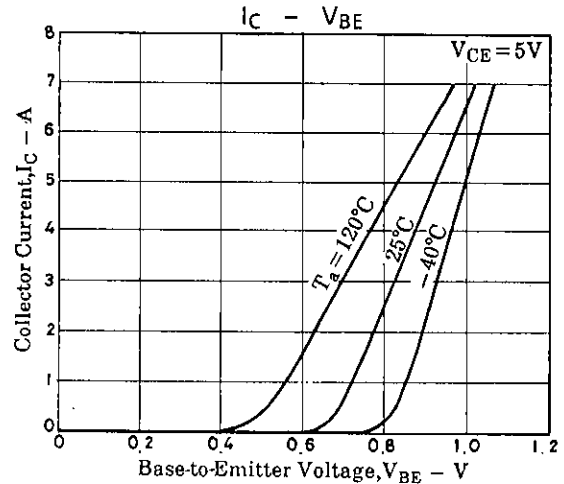
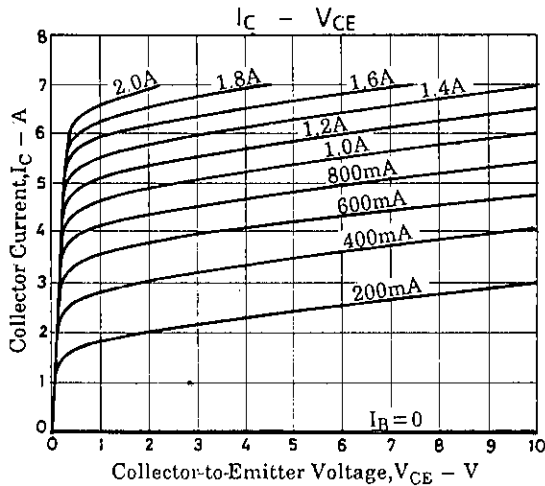


Unit (resistance:Ω, capacitance:F)

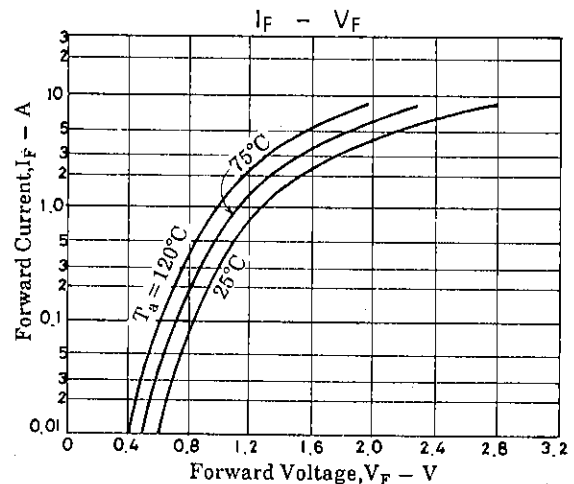
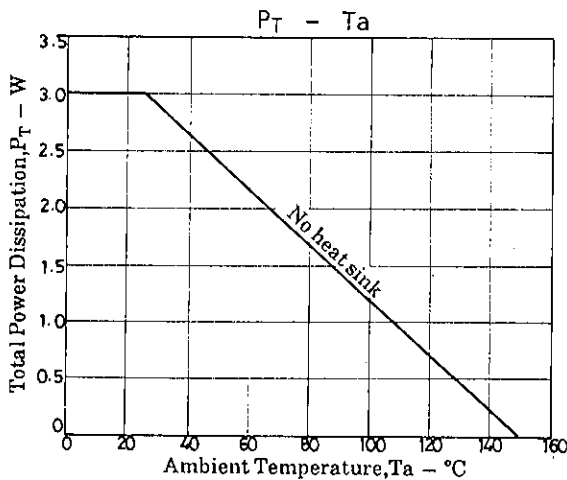
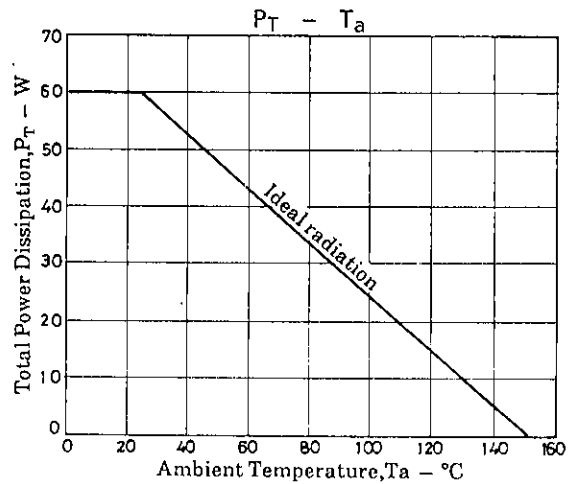
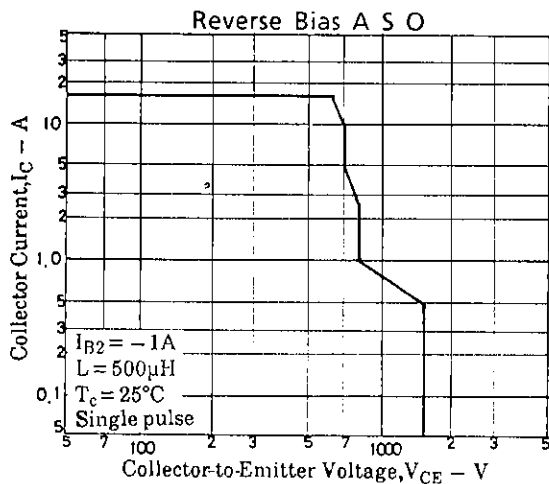
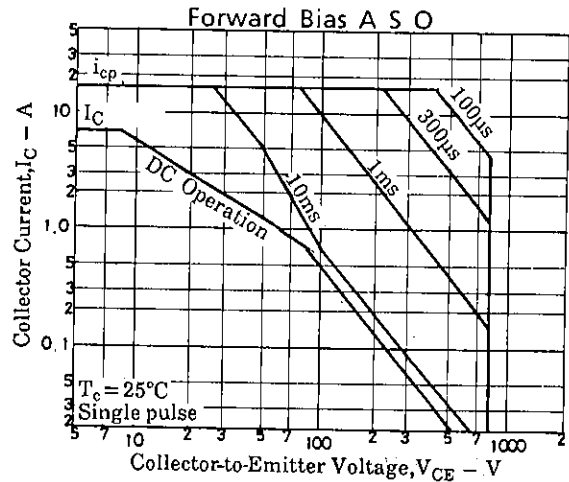
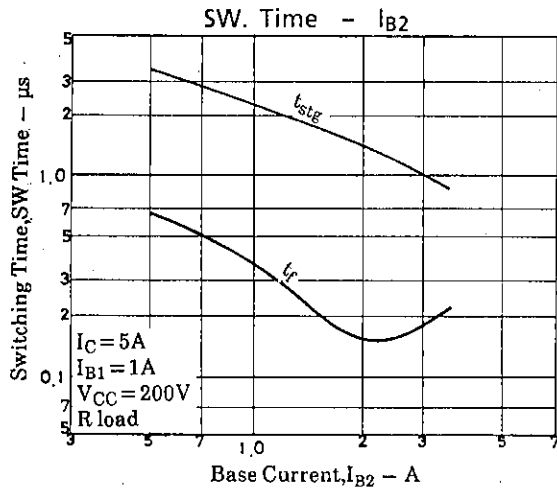
HPA72R

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			min	typ	max	unit
Diode Forward Voltage	$V_F(1)$	$I_F = 4A$			3	V
	$V_F(2)$	$I_F = 7A$			5	V
Diode Reverse Recovery Time	t_{rr}	$I_F = -I_R = 100mA$			1	μs
Diode Forward Recovery Time	t_{fr}	$I_F = 100mA$	0.1	0.2		μs



HPA72R



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