

SANYO

No.3366

2SB1472/2SD2224

PNP/NPN Epitaxial Planar Silicon Transistors

Driver Applications

Applications

- Motor drivers, printer hammer drivers, relay drivers, voltage regulator control

Features

- Suitable for sets whose height is restricted
- High DC current gain
- Large current capacity and wide ASO

(): 2SB1472

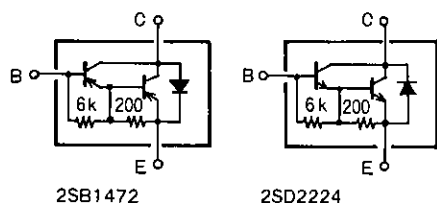
Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

			unit
Collector to Base Voltage	V_{CB0}	(-)70	V
Collector to Emitter Voltage	V_{CE0}	(-)60	V
Emitter to Base Voltage	V_{EB0}	(-)6	V
Collector Current	I_C	(-)7	A
Peak Collector Current	i_{cp}	(-)10	A
Collector Dissipation	P_C	1.65	W
		35	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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

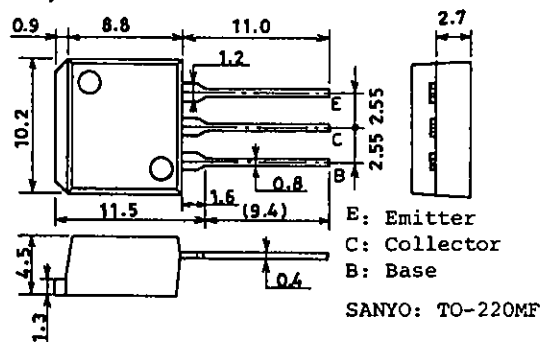
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Collector Cutoff Current	I_{CBO}	$V_{CB} = (-)40\text{V}, I_E = 0$			(-)0.1	mA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = (-)5\text{V}, I_C = 0$			(-)3.0	mA
DC Current Gain	h_{FE}	$V_{CE} = (-)2\text{V}, I_C = (-)3.5\text{A}$	2000	5000		
Gain-Bandwidth Product	f_T	$V_{CE} = (-)5\text{V}, I_C = (-)3.5\text{A}$		20		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = (-)3.5\text{A}, I_B = (-)7\text{mA}$		0.9	(-)1.5	V
				(-1.0)		V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = (-)3.5\text{A}, I_B = (-)7\text{mA}$			(-)2.0	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = (-)5\text{mA}, I_E = 0$	(-)70			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-)50\text{mA}, R_{BE} = \infty$	(-)60			V

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Electrical Connection

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Unit (resistance: Ω)**Package Dimensions 2049B**
(unit: mm)

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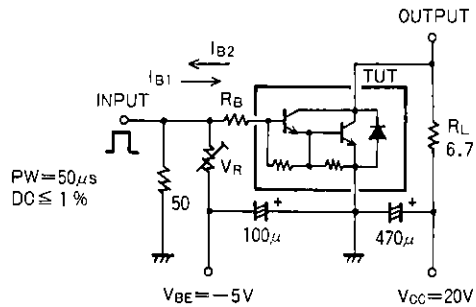
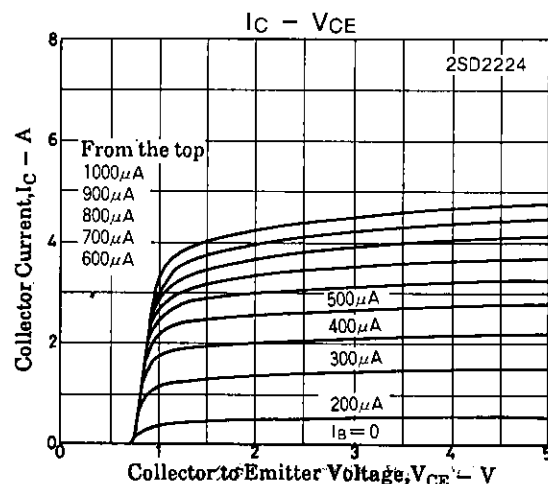
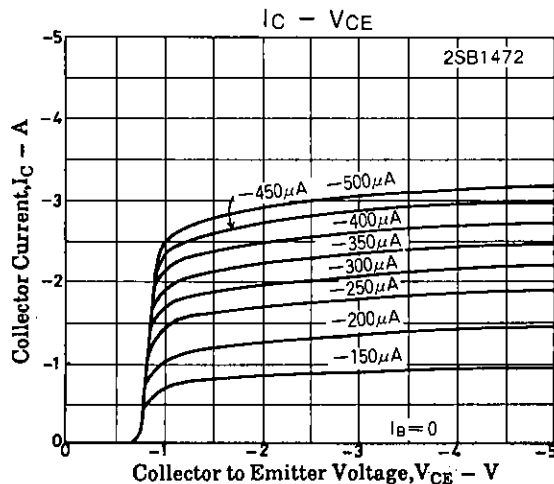
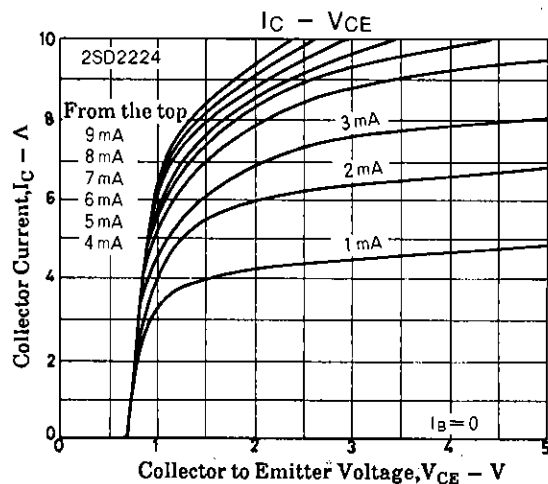
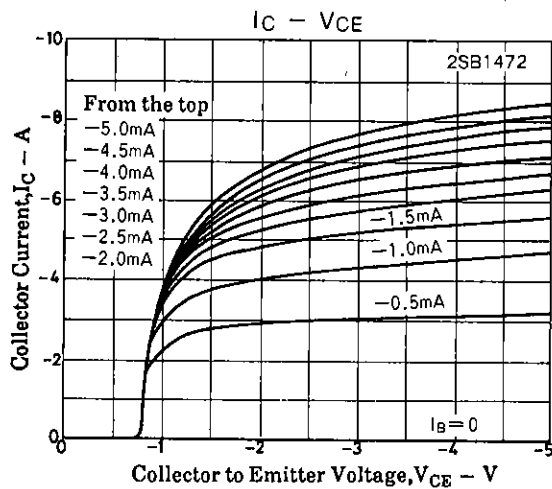
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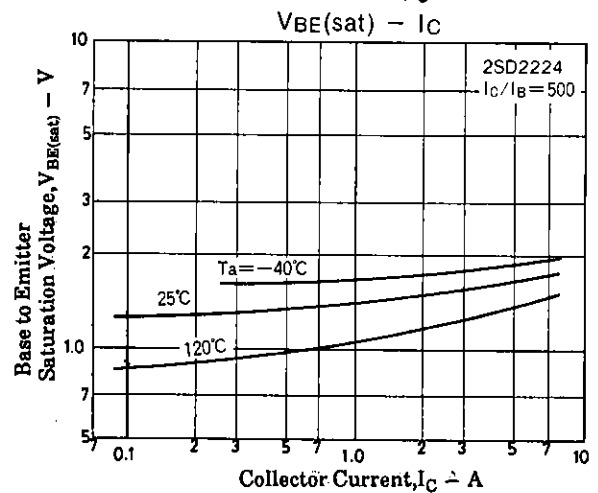
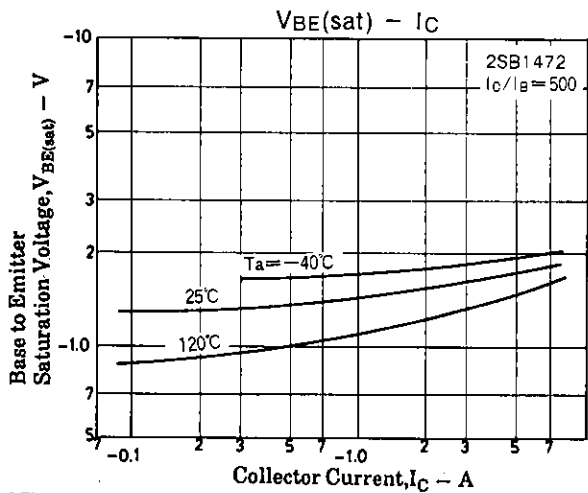
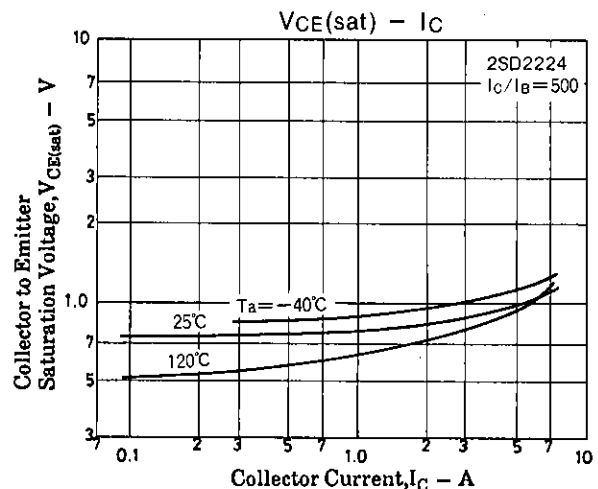
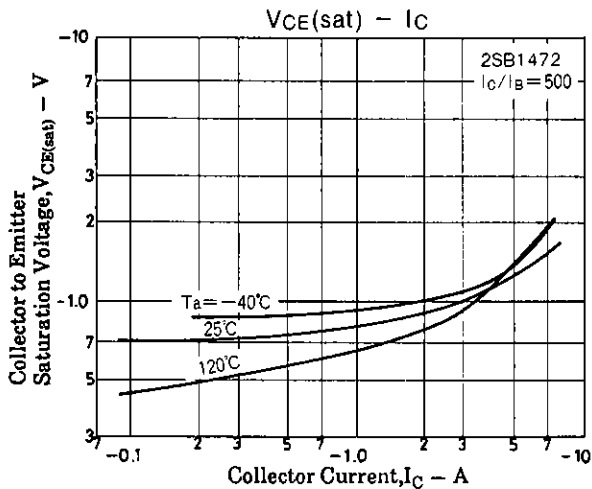
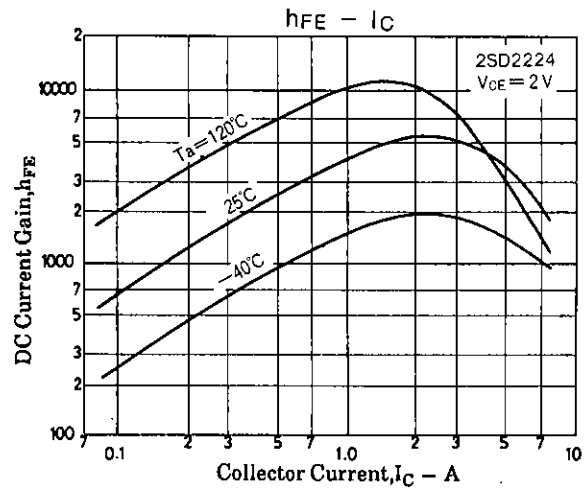
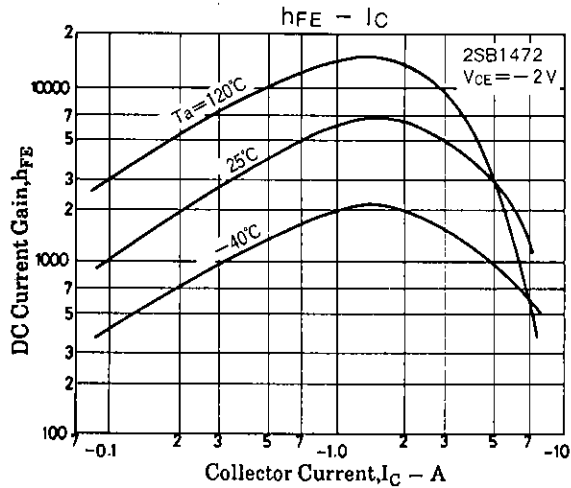
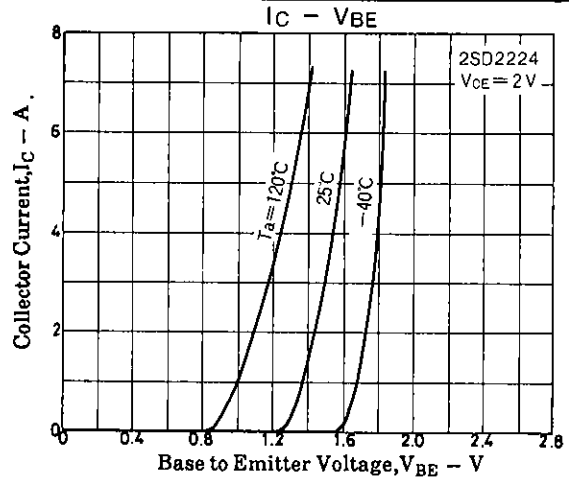
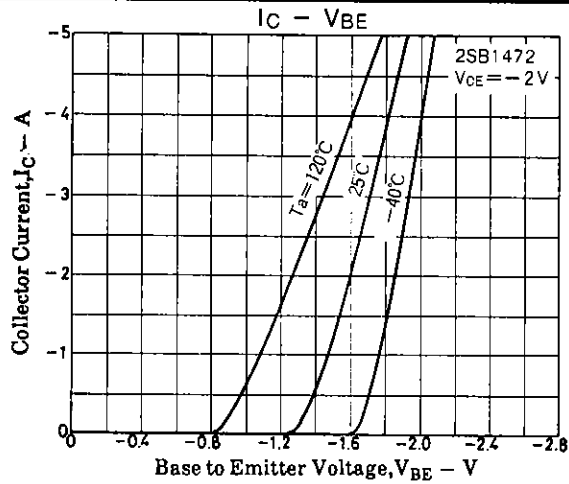
			min	typ	max	unit
Turn-ON time	t_{on}	See specified Test Circuit.		(0.5)0.6		μs
Storage Time	t_{stg}	Same as above.		(1.5)3.0		μs
Fall Time	t_f	Same as above.		(1.4)1.7		μs

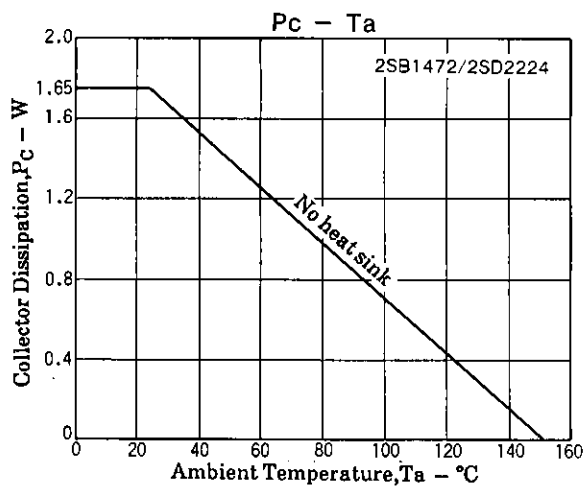
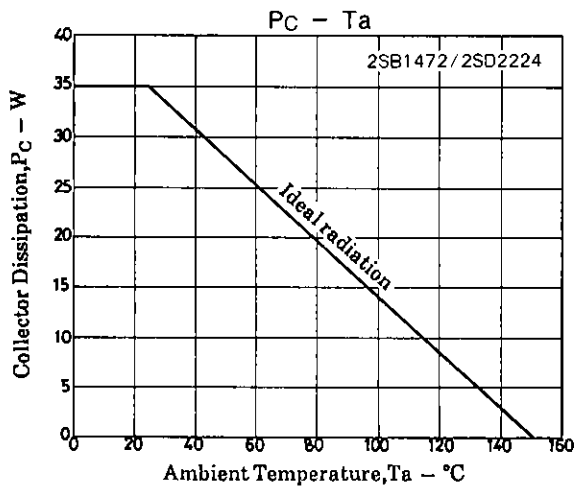
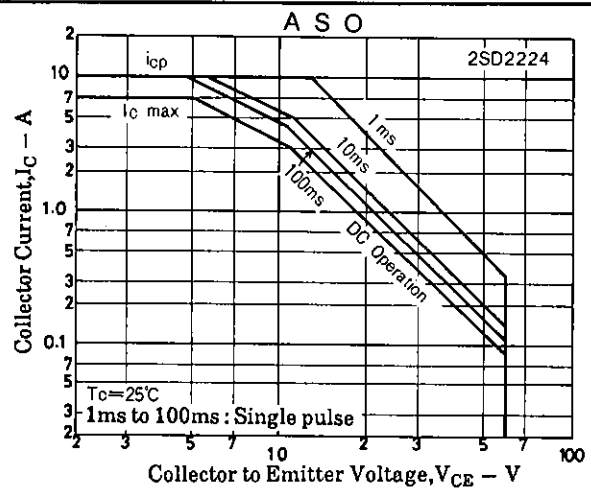
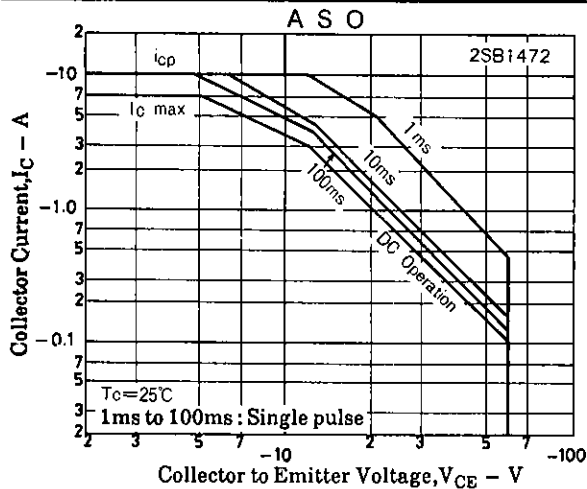
Switching Time Test Circuit
(For PNP, the polarity is reversed.)

$$500I_{B1} = -500I_{B2} = I_C = 3A$$

Unit (resistance: Ω , capacitance: F)

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