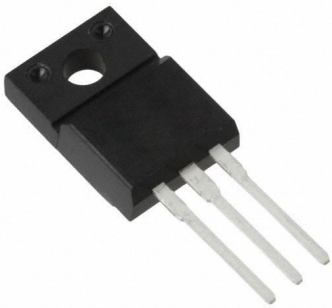


2SB0940AP Datasheet

www.digi-electronics.com



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	2SB0940AP-DG
Manufacturer	Panasonic Electronic Components
Manufacturer Product Number	2SB0940AP
Description	TRANS PNP 180V 2A TO220F-A1
Detailed Description	Bipolar (BJT) Transistor PNP 180 V 2 A 30MHz 2 W Th rough Hole TO-220F-A1



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

2SB0940AP

Series:

-

Transistor Type:

PNP

Voltage - Collector Emitter Breakdown (Max):

180 V

Current - Collector Cutoff (Max):

50µA (ICBO)

Power - Max:

2 W

Operating Temperature:

150°C (TJ)

Package / Case:

TO-220-3 Full Pack

Base Product Number:

2SB094

Manufacturer:

Panasonic Electronic Components

Product Status:

Obsolete

Current - Collector (Ic) (Max):

2 A

Vce Saturation (Max) @ Ib, Ic:

1V @ 50mA, 500mA

DC Current Gain (hFE) (Min) @ Ic, Vce:

100 @ 150mA, 10V

Frequency - Transition:

30MHz

Mounting Type:

Through Hole

Supplier Device Package:

TO-220F-A1

Environmental & Export classification

RoHS Status:

RoHS non-compliant

ECCN:

EAR99

Moisture Sensitivity Level (MSL):

1 (Unlimited)

HTSUS:

8541.29.0075

2SB0940 (2SB940), 2SB0940A (2SB940A)

Silicon PNP epitaxial planar type

For power amplification

For TV vertical deflection output

Complementary to 2SD1264, 2SD1264A

■ Features

- High collector-emitter voltage (Base open) V_{CE0}
- Large collector power dissipation P_C
- Full-pack package which can be installed to the heat sink with one screw

■ Absolute Maximum Ratings $T_C = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	-200	V
Collector-emitter voltage (Base open)	2SB0940	V_{CEO} -150	V
	2SB0940A	-180	
Emitter-base voltage (Collector open)	V_{EBO}	-6	V
Collector current	I_C	-2	A
Peak collector current	I_{CP}	-3	A
Collector power dissipation	P_C	30	W
		$T_a = 25^\circ\text{C}$	2
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

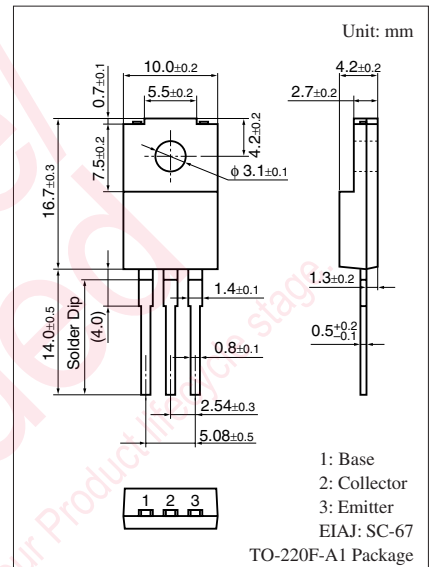
■ Electrical Characteristics $T_C = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = -50 \mu\text{A}$, $I_E = 0$	-200			V
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = -5 \text{ mA}$, $I_B = 0$	-150			V
			-180			
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = -500 \mu\text{A}$, $I_C = 0$	-6			V
Base-emitter voltage	V_{BE}	$V_{CE} = -10 \text{ V}$, $I_C = -400 \text{ mA}$			-1	V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = -200 \text{ V}$, $I_E = 0$			-50	μA
Emitter-base cutoff current (Collector open)	I_{EBO}	$V_{EB} = -4 \text{ V}$, $I_C = 0$			-50	μA
Forward current transfer ratio	h_{FE1}^*	$V_{CE} = -10 \text{ V}$, $I_C = -150 \text{ mA}$	60		240	—
	h_{FE2}	$V_{CE} = -10 \text{ V}$, $I_C = -400 \text{ mA}$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500 \text{ mA}$, $I_B = -50 \text{ mA}$			-1	V
Transition frequency	f_T	$V_{CE} = -10 \text{ V}$, $I_C = -0.5 \text{ A}$, $f = 10 \text{ MHz}$		30		MHz

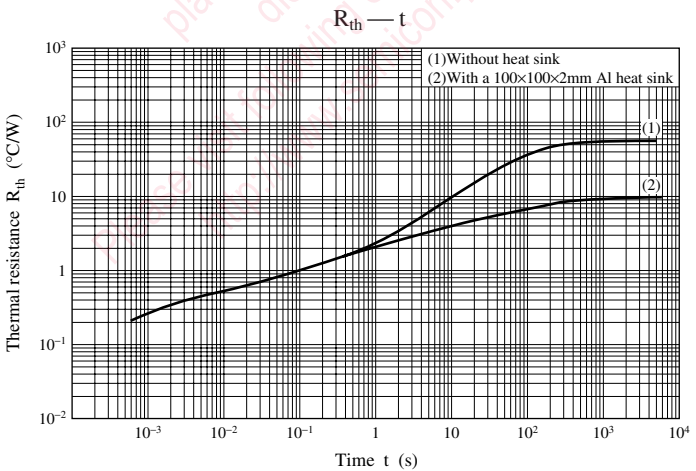
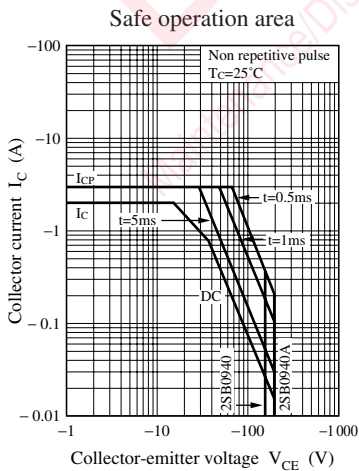
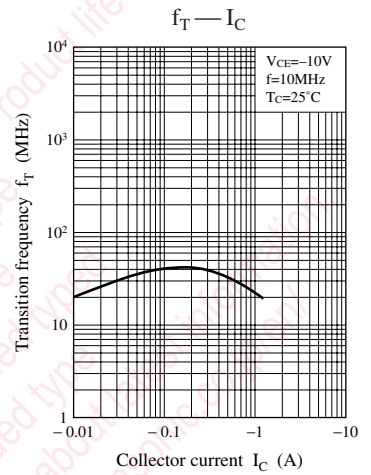
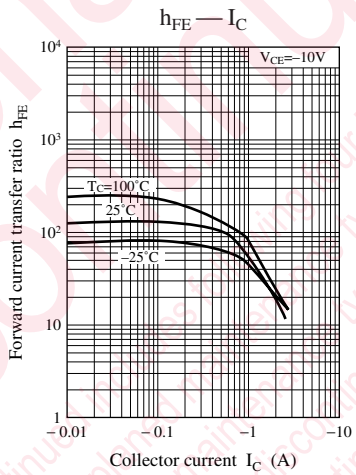
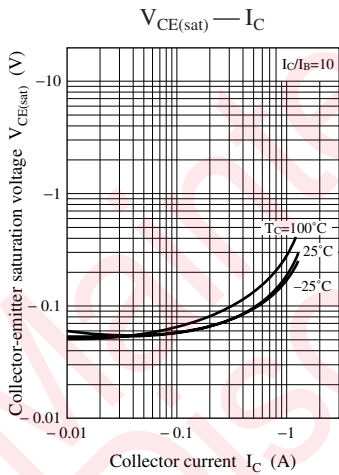
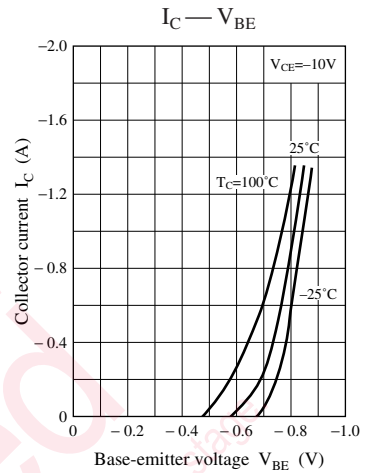
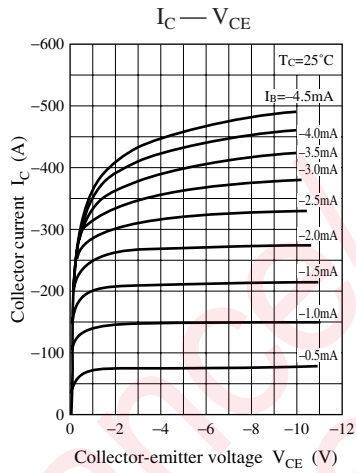
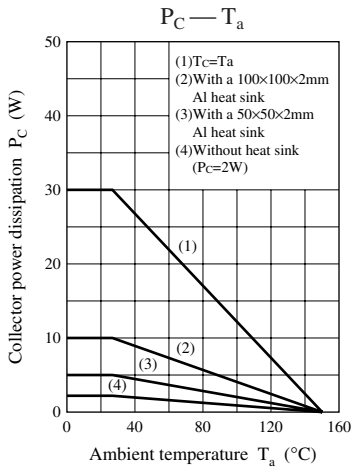
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. *: Rank classification

Rank	Q	P
h_{FE1}	60 to 140	100 to 240



Note) The part numbers in the parenthesis show conventional part number.



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