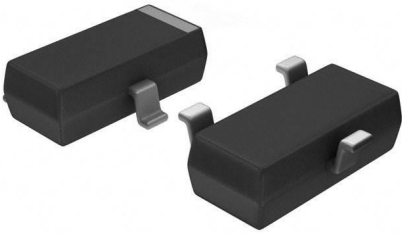


2SB07790RL Datasheet

www.digi-electronics.com



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DiGi Electronics Part Number	2SB07790RL-DG
Manufacturer	Panasonic Electronic Components
Manufacturer Product Number	2SB07790RL
Description	TRANS PNP 20V 0.5A MINI3
Detailed Description	Bipolar (BJT) Transistor PNP 20 V 500 mA 150MHz 200 mW Surface Mount Mini3-G1



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:

2SB07790RL

Series:

-

Transistor Type:

PNP

Voltage - Collector Emitter Breakdown (Max):

20 V

Current - Collector Cutoff (Max):

1 μ A

Power - Max:

200 mW

Operating Temperature:

150°C (TJ)

Package / Case:

TO-236-3, SC-59, SOT-23-3

Base Product Number:

2SB0779

Manufacturer:

Panasonic Electronic Components

Product Status:

Obsolete

Current - Collector (Ic) (Max):

500 mA

Vce Saturation (Max) @ Ib, Ic:

400mV @ 50mA, 500mA

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

130 @ 500mA, 2V

Frequency - Transition:

150MHz

Mounting Type:

Surface Mount

Supplier Device Package:

Mini3-G1

Environmental & Export classification

Moisture Sensitivity Level (MSL):

1 (Unlimited)

HTSUS:

8541.21.0075

ECCN:

EAR99

2SB0779 (2SB779)

Silicon PNP epitaxial planar type

For low-frequency output amplification

■ Features

- Low collector-emitter saturation voltage $V_{CE(sat)}$
- Satisfactory linearity of forward current transfer ratio h_{FE} at the low collector voltage
- Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	-25	V
Collector-emitter voltage (Base open)	V_{CEO}	-20	V
Emitter-base voltage (Collector open)	V_{EBO}	-7	V
Collector current	I_C	-500	mA
Peak collector current	I_{CP}	-1	A
Collector power dissipation	P_C	200	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = -10 \mu\text{A}, I_E = 0$	-25			V
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = -1 \text{ mA}, I_B = 0$	-20			V
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = -10 \mu\text{A}, I_C = 0$	-7			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = -25 \text{ V}, I_E = 0$			-100	nA
Collector-emitter cutoff current (Base open)	I_{CEO}	$V_{CE} = -20 \text{ V}, I_B = 0$			-1	μA
Forward current transfer ratio *1	h_{FE1} *2	$V_{CE} = -2 \text{ V}, I_C = -500 \text{ mA}$	90		220	—
	h_{FE2}	$V_{CE} = -2 \text{ V}, I_C = -1 \text{ A}$	25			—
Collector-emitter saturation voltage *1	$V_{CE(sat)}$	$I_C = -500 \text{ mA}, I_B = -50 \text{ mA}$		-0.2	-0.4	V
Base-emitter saturation voltage *1	$V_{BE(sat)}$	$I_C = -500 \text{ mA}, I_B = -50 \text{ mA}$			-1.2	V
Transition frequency	f_T	$V_{CB} = -10 \text{ V}, I_E = 50 \text{ mA}, f = 200 \text{ MHz}$		150		MHz
Collector output capacitance (Common-emitter reverse transfer)	C_{ob}	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		15		pF

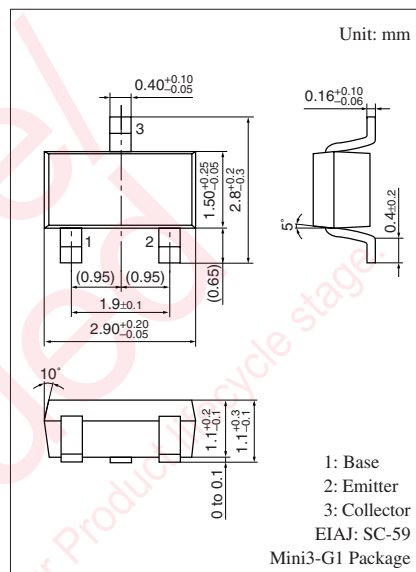
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. *1: Pulse measurement

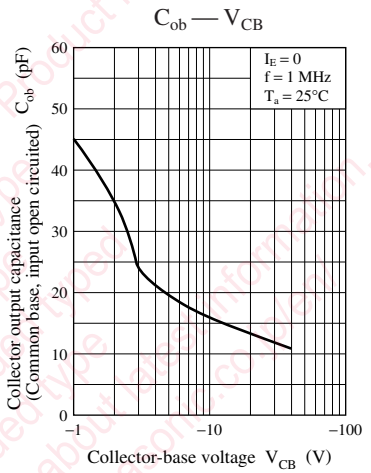
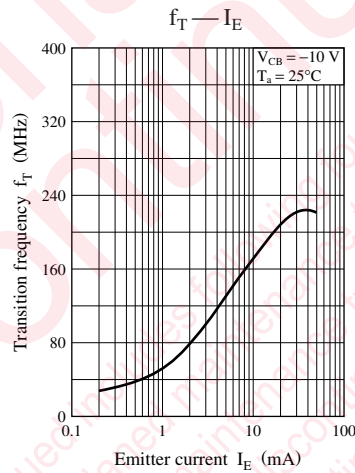
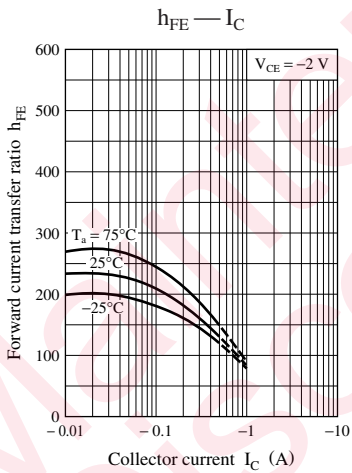
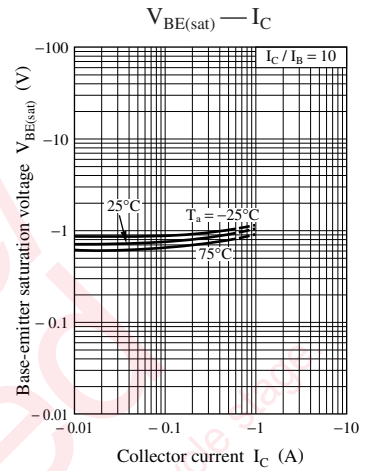
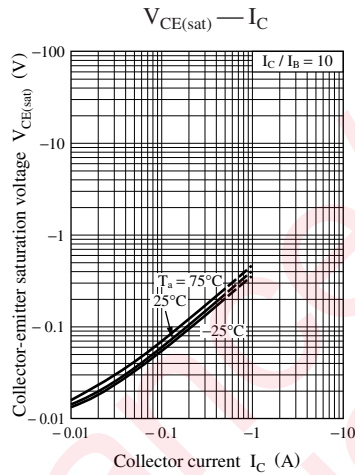
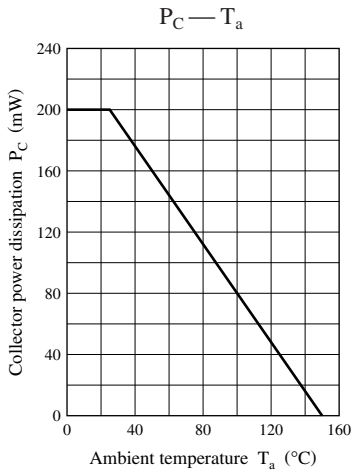
*2: Rank classification

Rank	Q	R
h_{FE1}	90 to 155	130 to 220

Note) The part number in the parenthesis shows conventional part number.



Marking Symbol: 1A



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