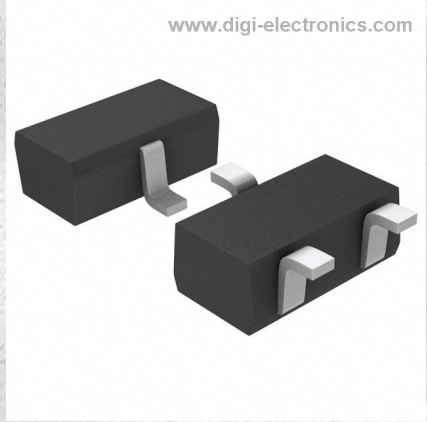
UNR31A1G0L Datasheet



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DiGi Electronics Part Number	UNR31A1G0L-DG
Manufacturer	Panasonic Electronic Components
Manufacturer Product Number	UNR31A1G0L
Description	TRANS PREBIAS PNP 50V SSSMINI3
Detailed Description	Pre-Biased Bipolar Transistor (BJT) PNP - Pre-Biased 50 V 80 mA 80 MHz 100 mW Surface Mount SSSMini3-F2

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
UNR31A1G0L	Panasonic Electronic Components
Series:	Product Status:
-	Obsolete
Transistor Type:	Current - Collector (Ic) (Max):
PNP - Pre-Biased	80 mA
Voltage - Collector Emitter Breakdown (Max):	Resistor - Base (R1):
50 V	10 kOhms
Resistor - Emitter Base (R2):	DC Current Gain (hFE) (Min) @ Ic, Vce:
10 kOhms	35 @ 5mA, 10V
Vce Saturation (Max) @ Ib, Ic:	Current - Collector Cutoff (Max):
250mV @ 300µA, 10mA	500nA
Frequency - Transition:	Power - Max:
80 MHz	100 mW
Mounting Type:	Package / Case:
Surface Mount	SOT-723
Supplier Device Package:	Base Product Number:
SSSMini3-F2	UNR31

Environmental & Export classification

Moisture Sensitivity Level (MSL):	ECCN:
1 (Unlimited)	EAR99
HTSUS:	
8541.21.0095	

UNR31A1G

Silicon PNP epitaxial planar type

For digital circuits

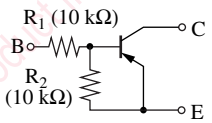
■ Features

- Suitable for high-density mounting and downsizing of the equipment
- Contribute to low power consumption

■ Package

- Code
  SSSMini3-F2
- Marking Symbol: CE
- Pin Name
  1: Base
  2: Emitter
  3: Collector

■ Internal Connection



■ Absolute Maximum Ratings $T_a = 25°C$

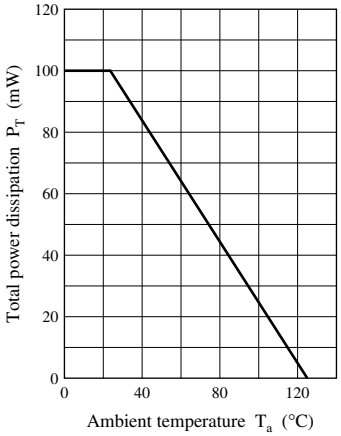
Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	−50	V
Collector-emitter voltage (Base open)	V_{CEO}	−50	V
Collector current	I_C	−80	mA
Total power dissipation	P_T	100	mW
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	−55 to +125	°C

■ Electrical Characteristics $T_a = 25°C \pm 3°C$

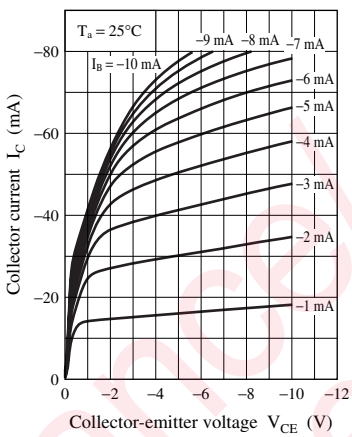
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = -10$ µA, $I_E = 0$	−50			V
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = -2$ mA, $I_B = 0$	−50			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = -50$ V, $I_E = 0$			− 0.1	µA
Collector-emitter cutoff current (Base open)	I_{CEO}	$V_{CE} = -50$ V, $I_B = 0$			− 0.5	µA
Emitter-base cutoff current (Collector open)	I_{EBO}	$V_{EB} = -6$ V, $I_C = 0$			− 0.5	mA
Forward current transfer ratio	h_{FE}	$V_{CE} = -10$ V, $I_C = -5$ mA	35			—
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10$ mA, $I_B = -0.3$ mA			− 0.25	V
Output voltage high-level	V_{OH}	$V_{CC} = -5$ V, $V_B = -0.5$ V, $R_L = 1$ kΩ	−4.9			V
Output voltage low-level	V_{OL}	$V_{CC} = -5$ V, $V_B = -2.5$ V, $R_L = 1$ kΩ			− 0.2	V
Input resistance	R_1		−30%	10	+30%	kΩ
Resistance ratio	R_1 / R_2		0.8	1.0	1.2	—
Transition frequency	f_T	$V_{CB} = -10$ V, $I_E = 1$ mA, f = 200 MHz		80		MHz

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

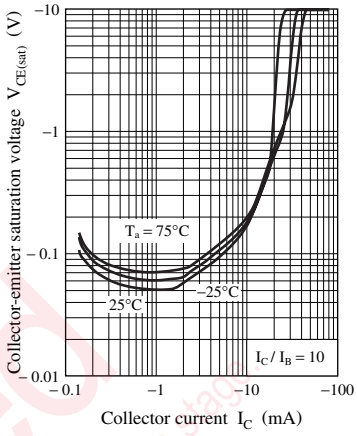
P_T — T_a



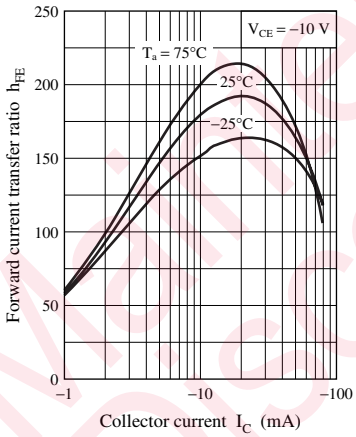
I_C — V_{CE}



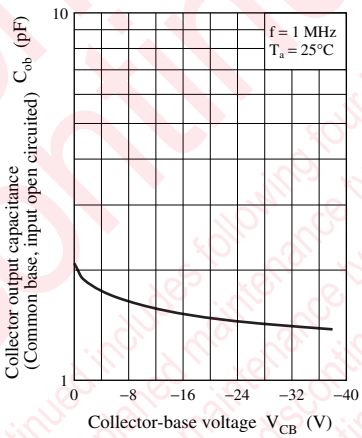
$V_{CE(sat)}$ — I_C



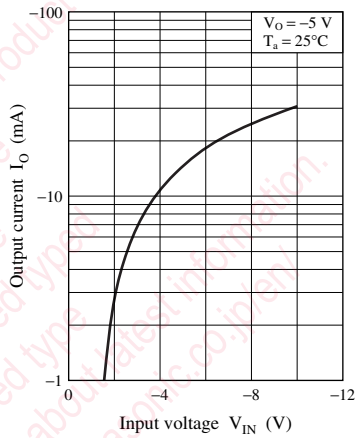
h_{FE} — I_C



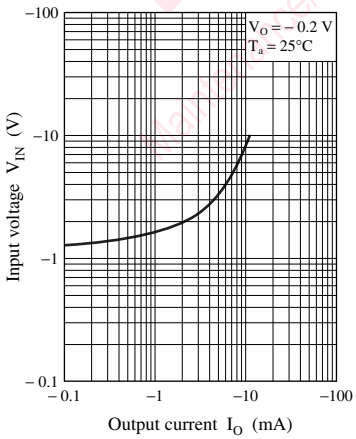
C_{ob} — V_{CB}



I_O — V_{IN}

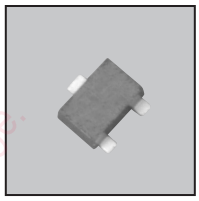


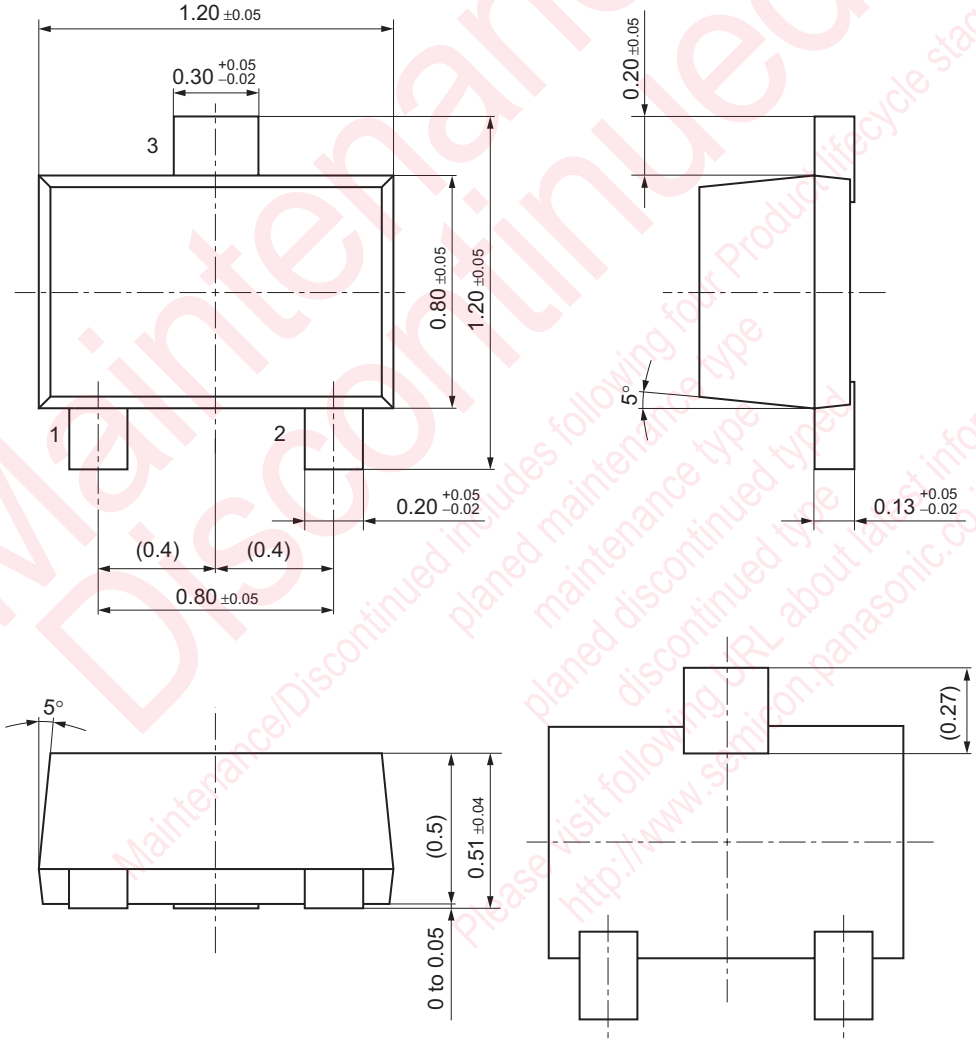
V_{IN} — I_O



SSSMini3-F2

Unit: mm





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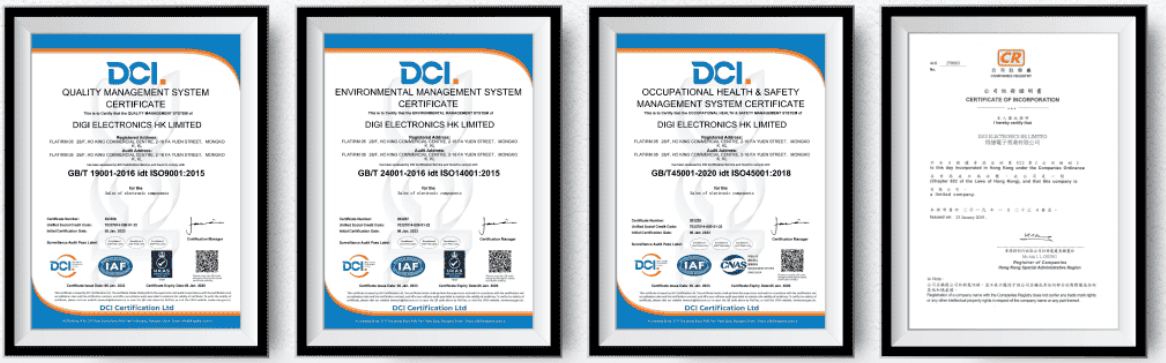

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