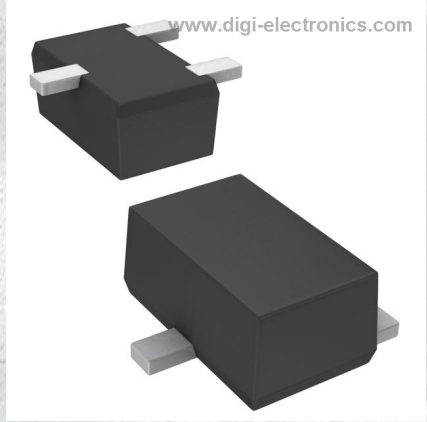
2SA2028G0L Datasheet



https://www.DiGi-Electronics.com

DiGi Electronics Part Number	2SA2028G0L-DG
Manufacturer	Panasonic Electronic Components
Manufacturer Product Number	2SA2028G0L
Description	TRANS PNP 20V 1A SMINI3
Detailed Description	Bipolar (BJT) Transistor PNP 20 V 1 A 170MHz 150 m W Surface Mount SMini3-F2

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
2SA2028G0L	Panasonic Electronic Components
Series:	Product Status:
-	Obsolete
Transistor Type:	Current - Collector (Ic) (Max):
PNP	1 A
Voltage - Collector Emitter Breakdown (Max):	Vce Saturation (Max) @ Ib, Ic:
20 V	100mV @ 10mA, 200mA
Current - Collector Cutoff (Max):	DC Current Gain (hFE) (Min) @ Ic, Vce:
-	160 @ 100mA, 2V
Power - Max:	Frequency - Transition:
150 mW	170MHz
Operating Temperature:	Mounting Type:
150°C (TJ)	Surface Mount
Package / Case:	Supplier Device Package:
SC-85	SMini3-F2
Base Product Number:	
2SA2028	

Environmental & Export classification

Moisture Sensitivity Level (MSL):	ECCN:
1 (Unlimited)	EAR99
HTSUS:	
8541.21.0075	

2SA2028G

Silicon PNP epitaxial planar type

For DC-DC converter

■ Features

- Low collector-emitter saturation voltage $V_{CE(sat)}$
- High-speed switching
- S-Mini type package, allowing downsizing and thinning of the equipment and automatic insertion through the tape packing

■ Package

- Code
  SMini3-F2
- Marking Symbol: AT
- Pin Name
  1. Base
  2. Emitter
  3. Collector

■ Absolute Maximum Ratings $T_a = 25°C$

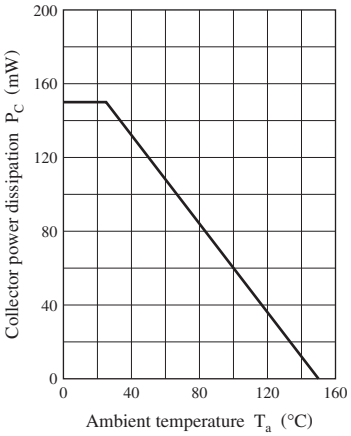
Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	−20	V
Collector-emitter voltage (Base open)	V_{CEO}	−20	V
Emitter-base voltage (Collector open)	V_{EBO}	−5	V
Collector current	I_C	−1	A
Peak collector current	I_{CP}	−3	A
Collector power dissipation	P_C	150	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	−55 to +125	°C

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

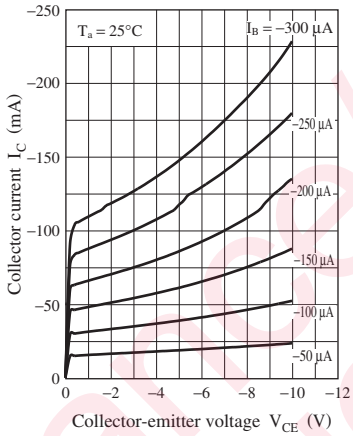
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = -10$ µA, $I_E = 0$	−20			V
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = -1$ mA, $I_B = 0$	−20			V
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = -10$ µA, $I_C = 0$	−5			V
Forward current transfer ratio	h_{FE}	$V_{CE} = -2$ V, $I_C = -100$ mA	160		560	—
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -200$ mA, $I_B = -10$ mA		−40	−100	mV
Transition frequency	f_T	$V_{CB} = -10$ V, $I_E = 10$ mA, f = 200 MHz		170		MHz
Collector output capacitance (Common base, input open circuited)	C_{ob}	$V_{CB} = -10$ V, $I_E = 0$, f = 1 MHz		20	30	pF

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

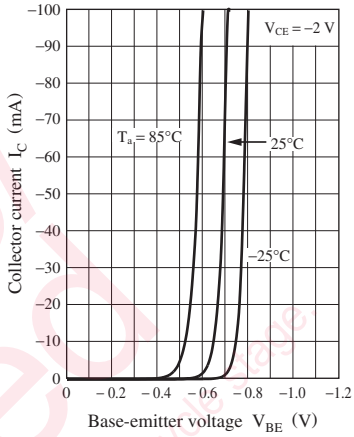
P_C — T_a



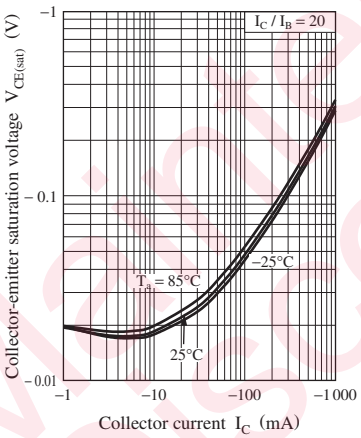
I_C — V_{CE}



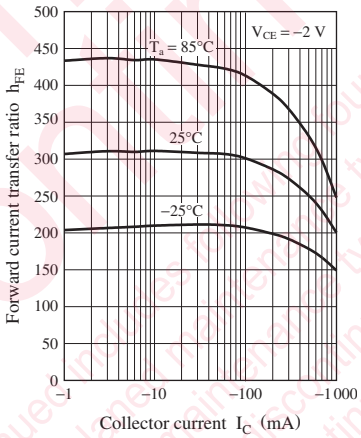
I_C — V_{BE}



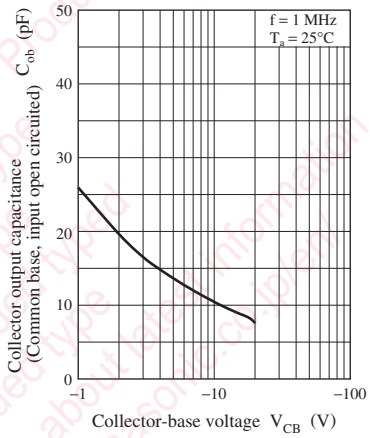
$V_{CE(sat)}$ — I_C



h_{FE} — I_C

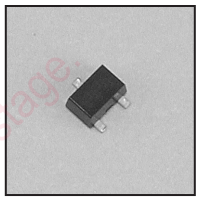


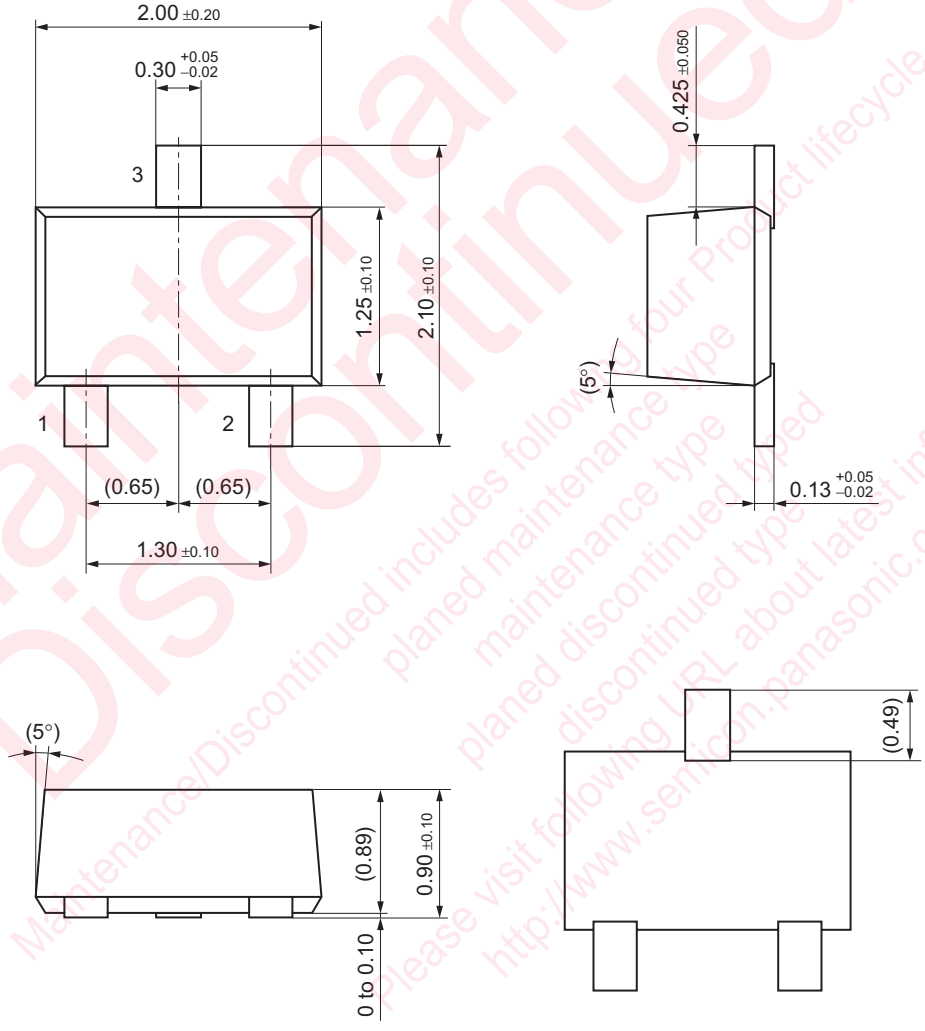
C_{ob} — V_{CB}



SMini3-F2

Unit: mm





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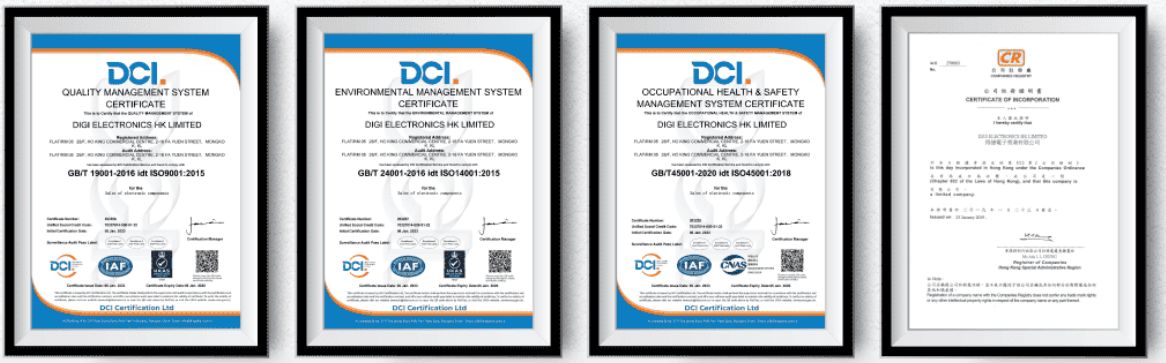

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