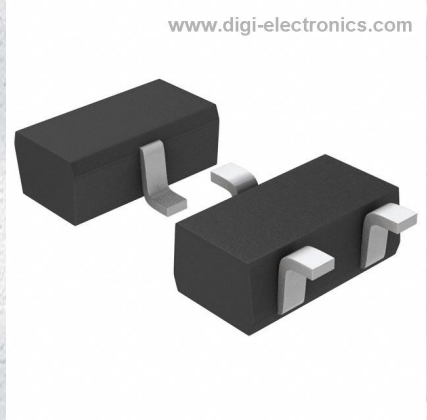
2SC5846G0L Datasheet



https://www.DiGi-Electronics.com

DiGi Electronics Part Number	2SC5846G0L-DG
Manufacturer	Panasonic Electronic Components
Manufacturer Product Number	2SC5846G0L
Description	TRANS NPN 50V 0.1A SSSMINI3
Detailed Description	Bipolar (BJT) Transistor NPN 50 V 100 mA 100MHz 100 mW Surface Mount SSSMini3-F2

Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
2SC5846G0L	Panasonic Electronic Components
Series:	Product Status:
-	Obsolete
Transistor Type:	Current - Collector (Ic) (Max):
NPN	100 mA
Voltage - Collector Emitter Breakdown (Max):	Vce Saturation (Max) @ Ib, Ic:
50 V	300mV @ 10mA, 100mA
Current - Collector Cutoff (Max):	DC Current Gain (hFE) (Min) @ Ic, Vce:
100µA	180 @ 2mA, 10V
Power - Max:	Frequency - Transition:
100 mW	100MHz
Operating Temperature:	Mounting Type:
125°C (TJ)	Surface Mount
Package / Case:	Supplier Device Package:
SOT-723	SSSMini3-F2
Base Product Number:	
2SC5846	

Environmental & Export classification

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

2SC5846G

Silicon NPN epitaxial planar type

For general amplification

■ Features

- High forward current transfer ratio h_{FE}
- SSS-mini type package, allowing downsizing and thinning of the equipment and automatic insertion through the tape packing

■ Package

- Code
  SSSMini3-F2
- Marking Symbol: 7K
- Pin Name
  1. Base
  2. Emitter
  3. Collector

■ Absolute Maximum Ratings $T_a = 25°C$

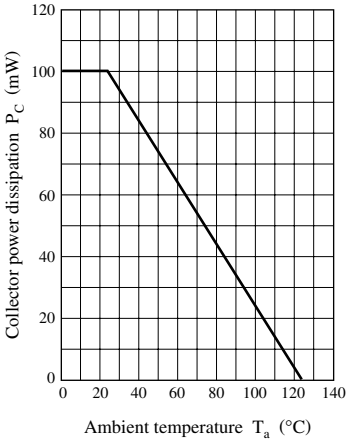
Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	60	V
Collector-emitter voltage (Base open)	V_{CEO}	50	V
Emitter-base voltage (Collector open)	V_{EBO}	7	V
Collector current	I_C	100	mA
Peak collector current	I_{CP}	200	mA
Collector power dissipation	P_C	100	mW
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	−55 to +125	°C

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

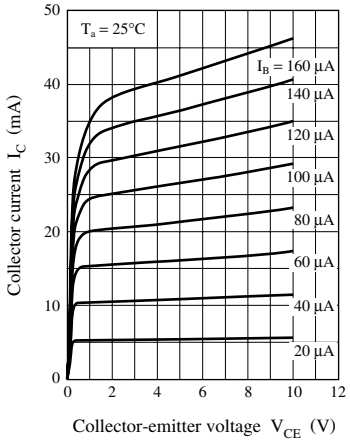
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = 10\ \mu A$, $I_E = 0$	60			V
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = 2$ mA, $I_B = 0$	50			V
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = 10\ \mu A$, $I_C = 0$	7			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = 20$ V, $I_E = 0$			0.1	μA
Collector-emitter cutoff current (Base open)	I_{CEO}	$V_{CE} = 10$ V, $I_B = 0$			100	μA
Forward current transfer ratio	h_{FE}	$V_{CE} = 10$ V, $I_C = 2$ mA	180		390	—
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100$ mA, $I_B = 10$ mA		0.1	0.3	V
Collector output capacitance (Common base, input open circuited)	C_{ob}	$V_{CB} = 10$ V, $I_E = 0$, f = 1 MHz		2.2		pF
Transition frequency	f_T	$V_{CB} = 10$ V, $I_E = -2$ mA, f = 200 MHz		100		MHz

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

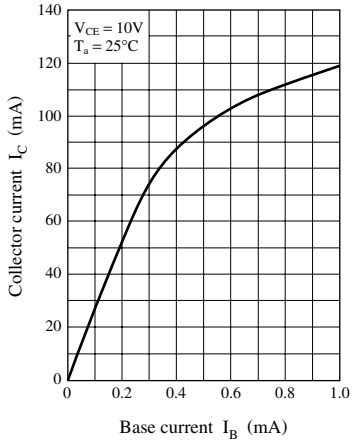
P_C — T_a



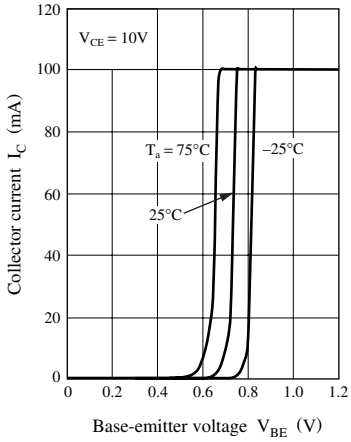
I_C — V_{CE}



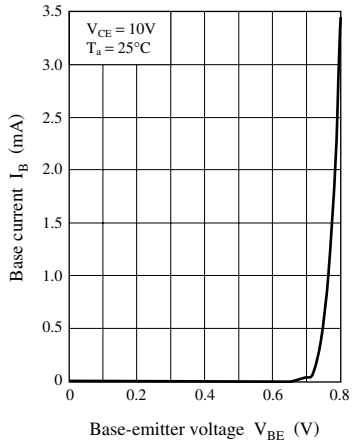
I_C — I_B



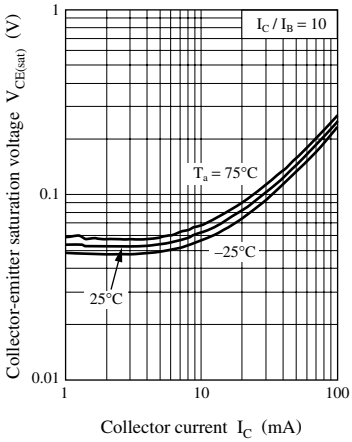
I_C — V_{BE}



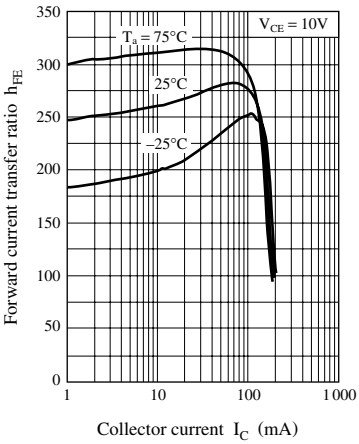
I_B — V_{BE}



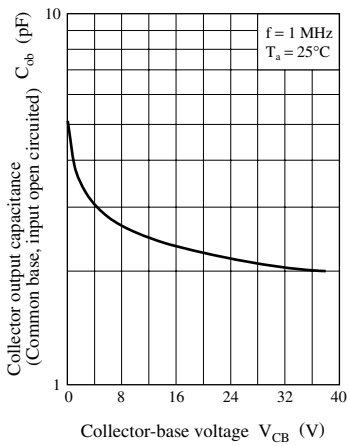
$V_{CE(sat)}$ — I_C



h_{FE} — I_C

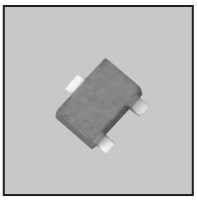


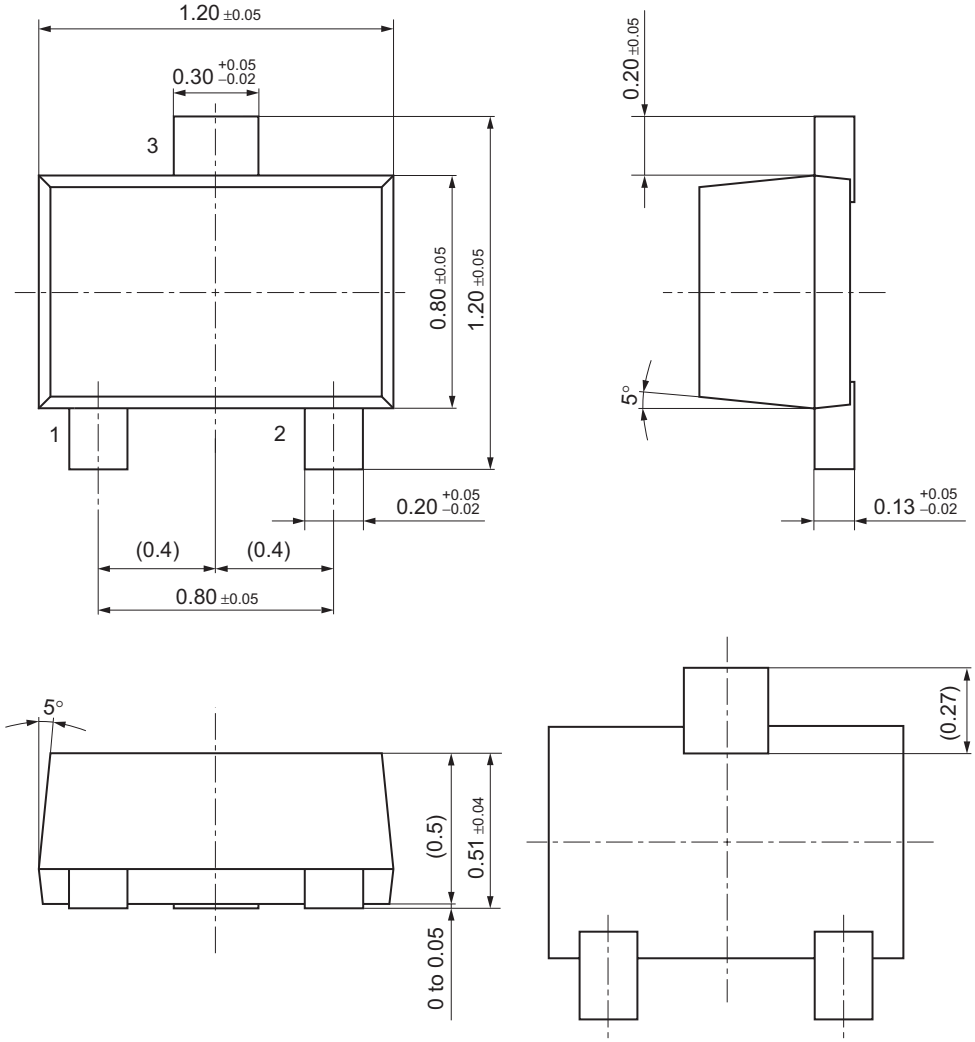
C_{ob} — V_{CB}



SSSMini3-F2

Unit: mm





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(6) Comply with the instructions for use in order to prevent breakdown and characteristics change due to external factors (ESD, EOS, thermal stress and mechanical stress) at the time of handling, mounting or at customer's process. When using products for which damp-proof packing is required, satisfy the conditions, such as shelf life and the elapsed time since first opening the packages.

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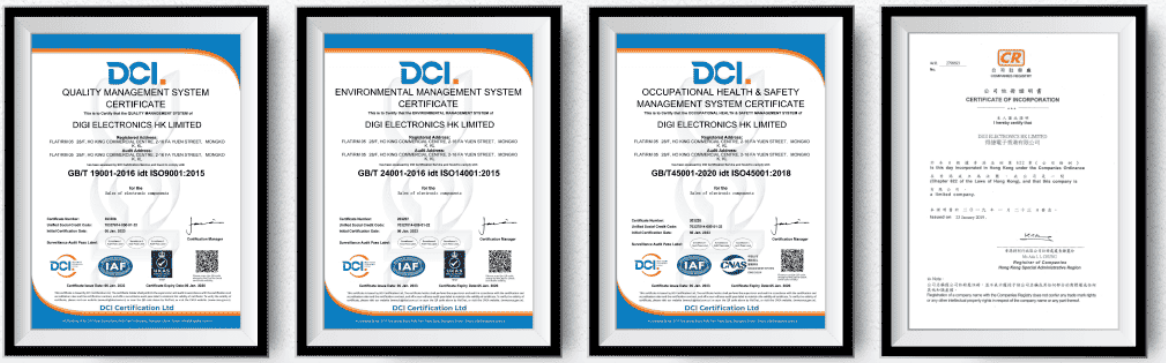

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