## DRA9A23J

### Silicon PNP epitaxial planar type

For digital circuits Complementary to DRC9A23J DRA5A23J in SSMini3 type package

#### ■ Features

- ullet Low collector-emitter saturation voltage  $V_{\text{CE(sat)}}$
- Contributes to miniaturization of sets, reduction of component count.
- Eco-friendly Halogen-free package

#### ■ Packaging

Embossed type (Thermo-compression sealing): 3000 pcs / reel (standard)

#### ■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	-50	V	
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	-50	V	
Collector current	$I_{C}$	-80	mA	
Total power dissipation	$P_{T}$	125	mW	
Junction temperature	T <sub>j</sub>	150	°C	
Storage temperature	T <sub>stg</sub>	-55 to +150	°C	

#### ■ Package

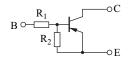
• Code

SSMini3-F3-B

- Pin Name
  - 1: Base
  - 2: Emitter
  - 3: Collector

#### ■ Marking Symbol: G6

#### ■ Internal Connection



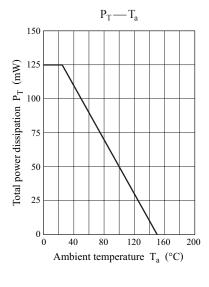
Resistance value	$R_1$	2.2	kΩ	
	$R_2$	47	kΩ	

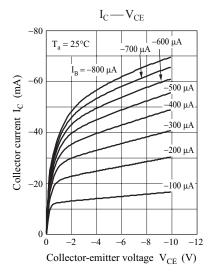
#### ■ Electrical Characteristics $T_a = 25$ °C±3°C

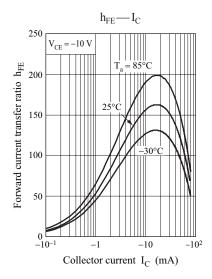
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	$V_{CBO}$	$I_{\rm C} = -10 \mu\text{A}, I_{\rm E} = 0$	-50			V
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	$I_C = -2 \text{ mA}, I_B = 0$	-50			V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{\rm CB} = -50 \text{ V}, I_{\rm E} = 0$			-0.1	μΑ
Collector-emitter cutoff current (Base open)	$I_{CEO}$	$V_{CE} = -50 \text{ V}, I_{B} = 0$			-0.5	μΑ
Emitter-base cutoff current (Collector open)	$I_{EBO}$	$V_{EB} = -6 \text{ V}, I_C = 0$			-0.2	mA
Forward current transfer ratio	$h_{FE}$	$V_{CE} = -10 \text{ V}, I_{C} = -5 \text{ mA}$	80			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	$I_C = -10 \text{ mA}, I_B = -0.5 \text{ mA}$			-0.25	V
Input voltage (ON)	V <sub>I(on)</sub>	$V_{CE} = -0.2 \text{ V}, I_{C} = -5 \text{ mA}$	-1.2			V
Input voltage (OFF)	V <sub>I(off)</sub>	$V_{CE} = -5 \text{ V}, I_{C} = -100 \mu\text{A}$			-0.4	V
Input resistance	$R_1$		-30%	2.2	+30%	kΩ
Resistance ratio	$R_1/R_2$		0.037	0.047	0.057	_

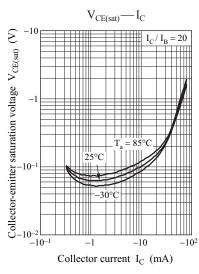
Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

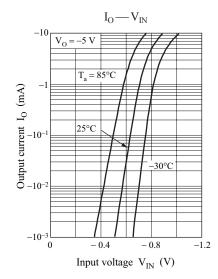
DRA9A23J Panasonic

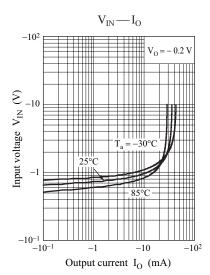








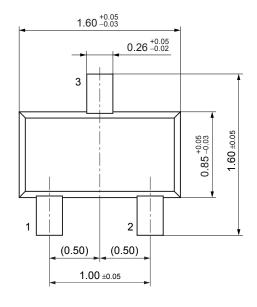


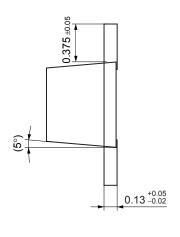


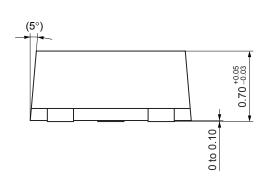
2 Ver. BED

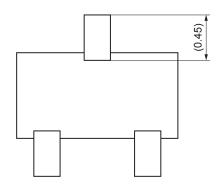
### SSMini3-F3-B

Unit: mm









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