



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



DB5S309K

Silicon epitaxial planar type

For high speed switching circuits
DB2S309 in SSMini5 type package

■ Features

- Short reverse recovery time t_{rr}
- Small reverse current I_R
- Halogen-free / RoHS compliant
(EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

■ Marking Symbol: 3B

■ Basic Part Number

Dual DB2S309 (Parallel)

■ Packaging

DB5S309K0R Embossed type (Thermo-compression sealing): 8 000 pcs / reel (standard)

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

Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	30	V
Repetitive peak reverse voltage	V_{RRM}	30	V
Forward current (Average)	$I_{F(AV)}$	100	mA
Peak forward current	I_{FM}	200	mA
Non-repetitive peak forward surge current *1	I_{FSM}	1	A
Junction temperature	T_j	125	$^\circ\text{C}$
Operating ambient temperature	T_{opr}	-40 to +85	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

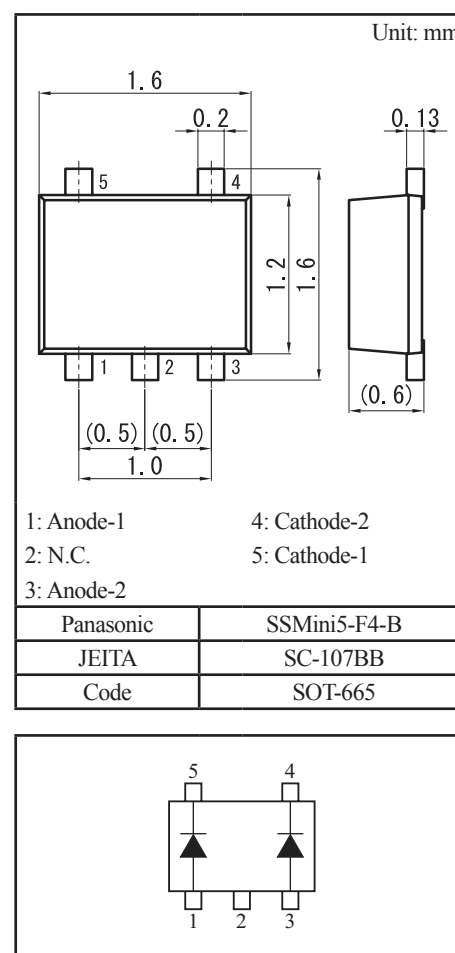
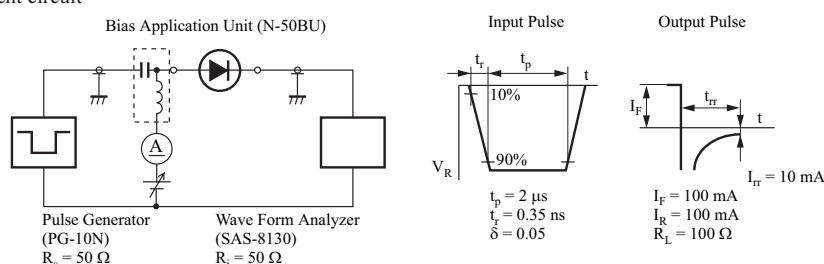
Note) *1: 50 Hz sine wave 1 cycle (Non-repetitive peak current)

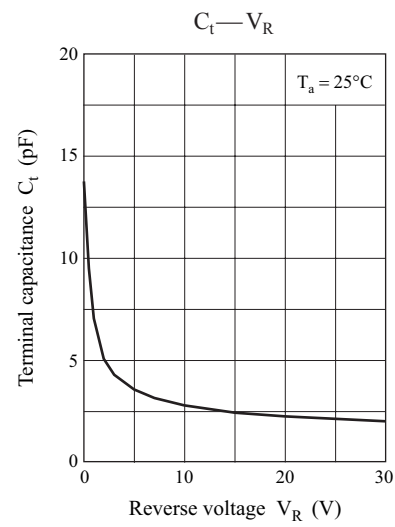
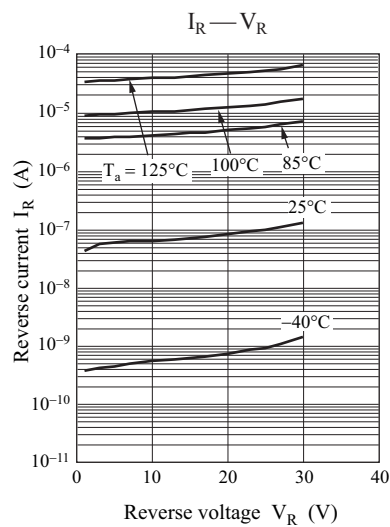
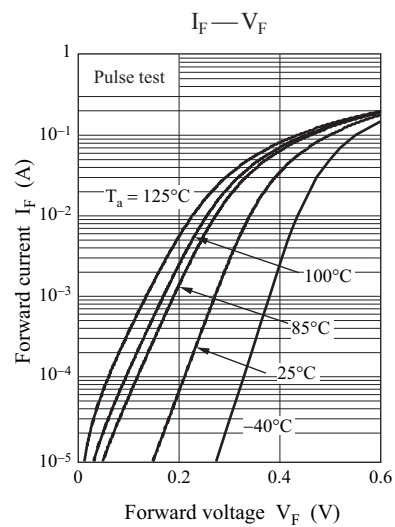
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_{F1}	$I_F = 10 \text{ mA}$			0.44	V
	V_{F2}	$I_F = 100 \text{ mA}$			0.58	
Reverse current	I_{R1}	$V_R = 10 \text{ V}$			0.3	μA
	I_{R2}	$V_R = 30 \text{ V}$			2.0	
Terminal capacitance	C_t	$V_R = 10 \text{ V}, f = 1 \text{ MHz}$		3.0		pF
Reverse recovery time *1	t_{rr}	$I_F = I_R = 100 \text{ mA}, I_{rr} = 10 \text{ mA}, R_L = 100 \Omega$		1.3		ns

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

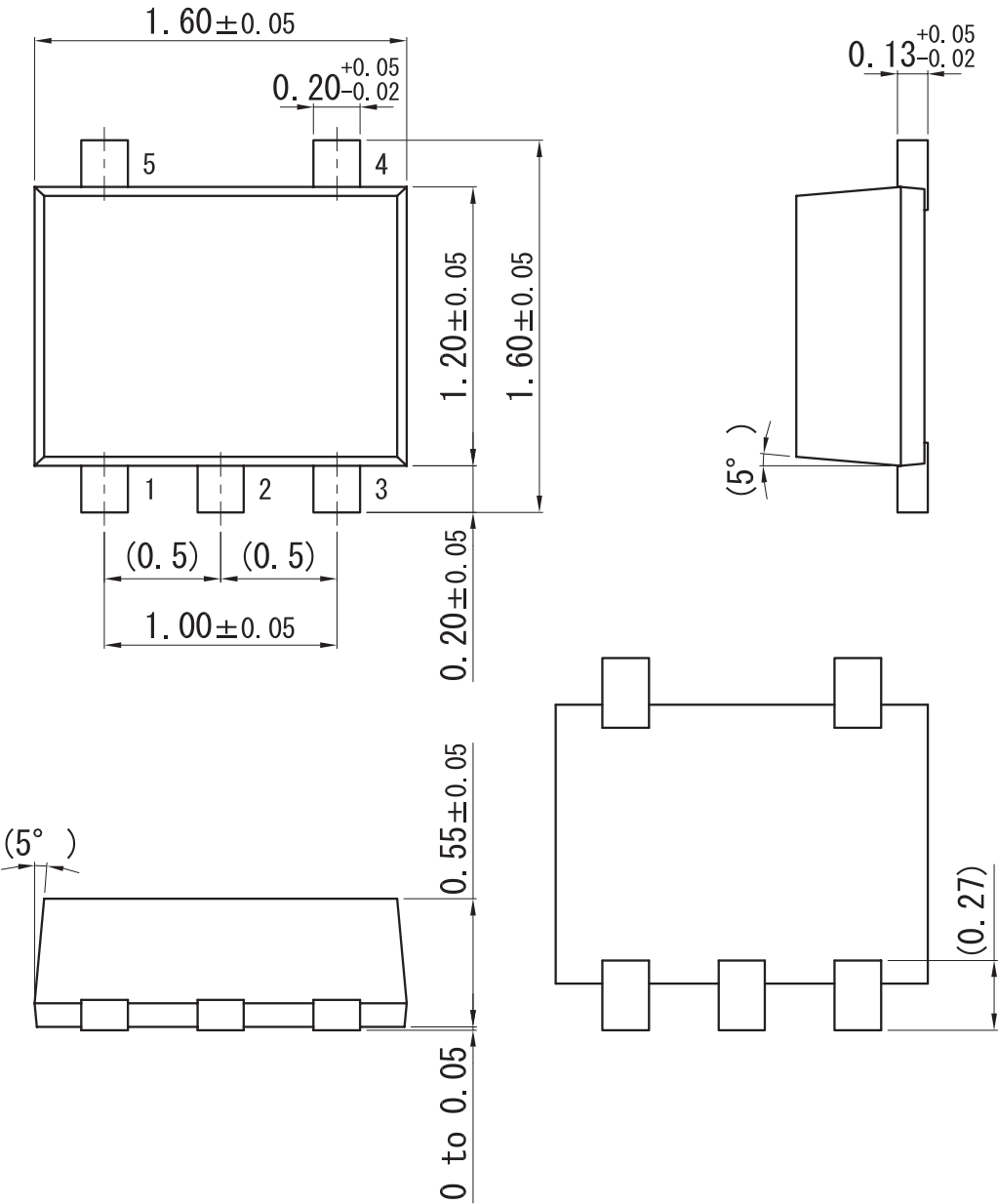
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
3. Absolute frequency of input and output is 250 MHz
4. *1: t_{rr} measurement circuit



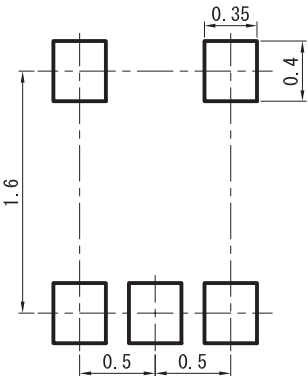


SSMini5-F4-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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