

MA5SD05XG

Silicon epitaxial planar type

For high speed switching circuits

■ Features

- Two isolated elements are contained in one package, optimum for high-density mounting.
- Optimum for high frequency rectification because of its short reverse recovery time t_{rr}

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

Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	45	V
Maximum peak reverse voltage	V_{RM}	45	V
Forward current *1	I_F	100	mA
Peak forward current *1	I_{FM}	300	mA
Non-repetitive peak forward surge current *1, *2	I_{FSM}	1	A
Junction temperature	T_j	125	$^\circ\text{C}$
Operating ambient temperature	T_{opr}	-30 to +85	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

Note) *1: Value for single diode

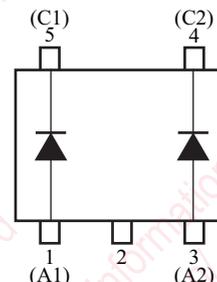
*2: 50 Hz sine wave 1 cycle (Non-repetitive peak current)

■ Package

- Code
SSMini5-F3
- Pin Name
1: Anode 1 4: Cathode 2
2: N.C. 5: Cathode 1
3: Anode 2

■ Marking Symbol: M5C

■ Internal Connection



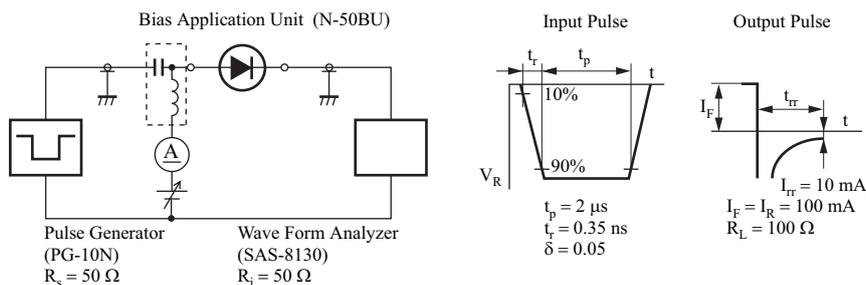
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 1 \text{ mA}$		0.27	0.35	V
		$I_F = 10 \text{ mA}$		0.35		
		$I_F = 100 \text{ mA}$		0.54	0.60	
Reverse current	I_R	$V_R = 40 \text{ V}$			5	μA
Terminal capacitance	C_t	$V_R = 0, f = 1 \text{ MHz}$		12	18	pF
Reverse recovery time *	t_{rr}	$I_F = I_R = 100 \text{ mA}, I_{rr} = 10 \text{ mA}, R_L = 100 \Omega$		2.0		ns

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

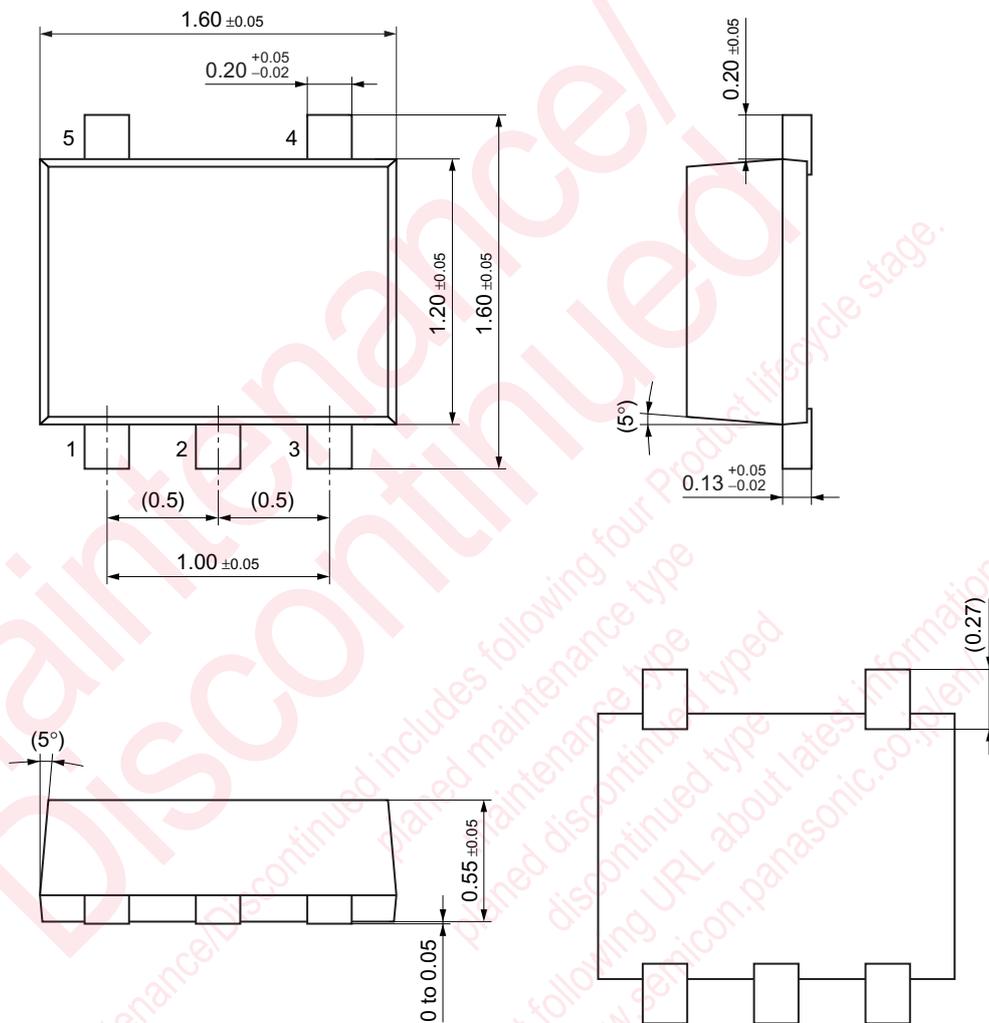
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

3. *: t_{rr} measurement circuit



SSMini5-F3

Unit: mm



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