MA4SD05X

Silicon epitaxial planar type

For high-speed switching circuits

Features

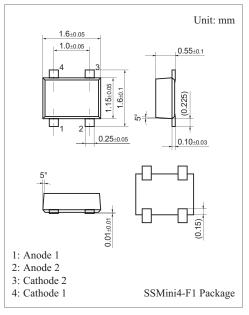
- Two isolated elements are contained in one package, allowing high-density mounting
- \bullet Optimum for high frequency rectification because of its short reverse recovery time $t_{\rm rr}$

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

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	А	
Junction temperature	Tj	125	°C	
Storage temperature	T _{stg}	-55 to +125	°C	

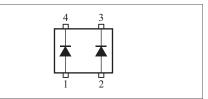
Note) *1: Value for single diode

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



Marking Symbol: M5C

Internal Connection



Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	V _{F1}	$I_F = 1 \text{ mA}$		0.27		
	V _{F2}	$I_F = 10 \text{ mA}$		0.35		V
	V _{F3}	$I_F = 100 \text{ mA}$		0.54	0.60	
Reverse current	I _R	$V_{R'} = 40 V$			5	μΑ
Terminal capacitance	Ct	$V_{RI} = 0 V, f = 1 MHz$		12	18	pF
Reverse recovery time *	t _{rr}	$I_F = I_{RI} = 100 \text{ mA}, I_{rr} = 10 \text{ mA}$ $R_{II} = 100 \Omega$		2.0		ns

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

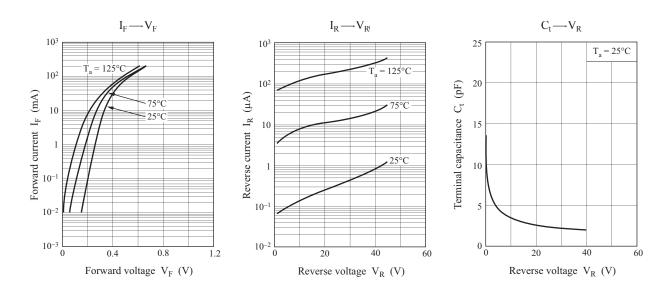
2. Absolute frequency of input and output is $250\ \mathrm{MHz}$

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

MA4SD05X

Panasonic



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