MA4ZD03

Silicon epitaxial planar type

For high speed switching
For small type power supply
For DC/DC converter

■ Features

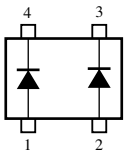
- Two isolated elements are contained in one package, allowing high-density mounting
- I_F = 100 mA rectification is possible
- Optimum for high frequency rectification because of its short reverse recovery time (t_{rr})

■ Package

- Code
  SMini4-F1
- Pin Name
  1: Anode 1 3: Cathode 2
  2: Anode 2 4: Cathode 1

■ Marking Symbol: M5A

■ Internal Connection



■ Absolute Maximum Ratings T_a = 25°C

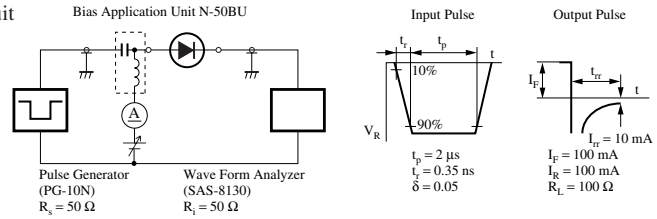
Parameter		Symbol	Rating	Unit
Forward current	Single	I_F	100	mA
	Double		75	
Peak forward current	Single	I_{FM}	300	mA
	Double		225	
Non-repetitive peak forward surge current	Single	I_{FSM}	1	A
	*Double		0.75	
Reverse voltage		V_R	45	V
Repetitive peak reverse voltage		V_{RRM}	45	V
Junction temperature		T_j	125	°C
Storage temperature		T_{stg}	−55 to +125	°C

Note) *: The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)

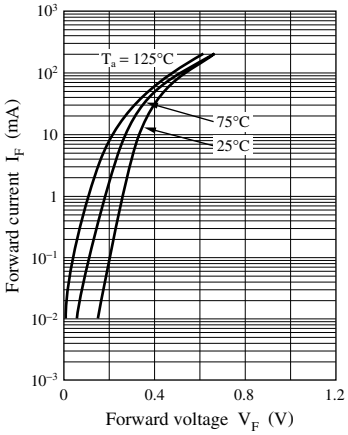
■ Electrical Characteristics T_a = 25°C ± 3°C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current	I_R	V_R = 40 V			5	μA
Forward voltage	V_F	I_F = 100 mA		0.54	0.60	V
Terminal capacitance	C_t	V_R = 0 V, f = 1 MHz		12	18	pF
Reverse recovery time *	t_{rr}	I_F = I_R = 100 mA I_{rr} = 10 mA, R_L = 100 Ω		1.2		ns

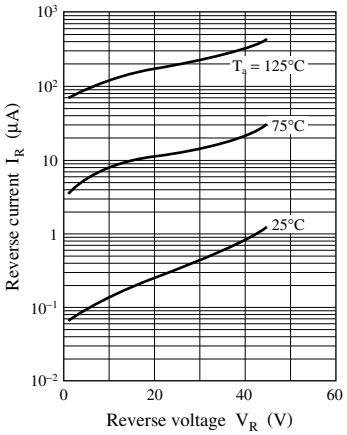
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
3. Absolute frequency of input and output is 250 MHz.
4.*: t_{rr} measurement circuit



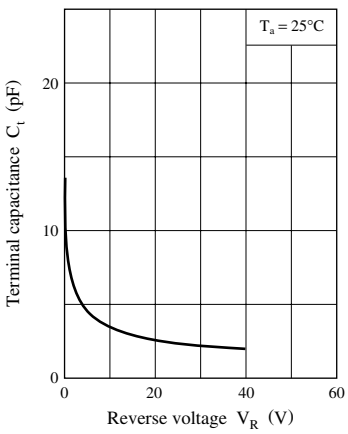
I_F — V_F



I_R — V_R



C_t — V_R



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