MA3Z7920G

Silicon epitaxial planar type

For super high speed switching For small current rectification

Features

- High-density mounting is possible
- Forward current (Average) $I_{F(AV)} = 100$ mA rectification is possible
- Optimum for high frequency rectification because of its short reverse recovery time t_{rr}
- Low forward voltage V_F and good rectification efficiency

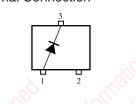
Absolute Maximum Ratings $T_a = 25^{\circ}C$

- Package
- Code
- SMini3-F2
- Pin Name
 - 1: Anode
 - 2: N.C.
 - 3: Cathode

Marking Symbol: M3T

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}	300	mA
Non-repetitive peak forward surge current *	I _{FSM}	1	A
Junction temperature	Tj	125	S°C o
Storage temperature	T _{stg}	-55 to +125	°C

Internal Connection



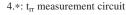
Note) *: The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)

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

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	VF	I _F = 100 mA	2		0.55	V
Reverse current	I _R	$V_R = 30 V$			15	μΑ
Terminal capacitance	Ct	$V_R = 0 V, f = 1 MHz$		20		pF
Reverse recovery time	t _{rr}	$I_F = I_R = 100 \text{ mA}$		2.0		ns
		$I_{rr} = 0.1 I_R, R_L = 100 \Omega$				

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.



Output Pulse

00 mA

100 mA

100 Ω

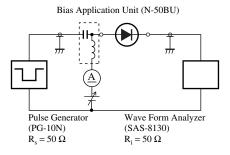
Input Pulse

 $= 2 \,\mu s$

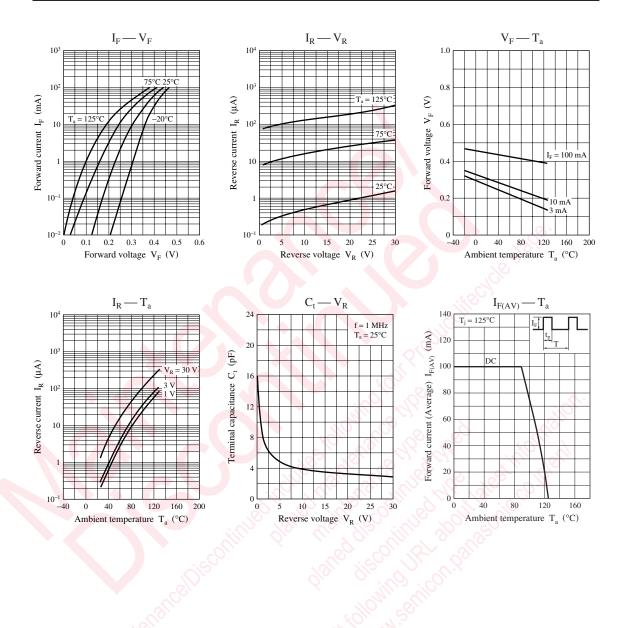
10%

t, = 0.35 ns

δ = 0.05

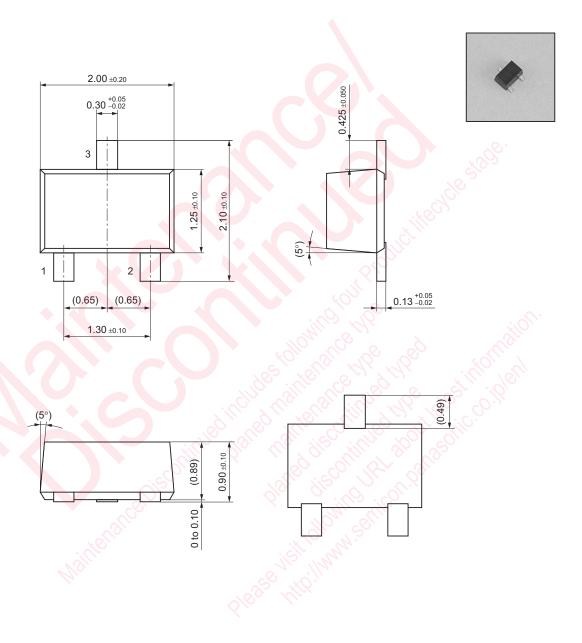


Panasonic



SMini3-F2

Unit: mm



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