

MA3S781FG

Silicon epitaxial planar type

For high speed switching circuits

For wave detection

■ Features

- Optimum for high-density mounting
- Short reverse recovery time t_{rr} , optimum for high-frequency rectification

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

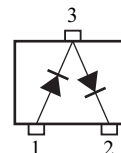
Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	30	V
Maximum peak reverse voltage	V_{RM}	30	V
Forward current	Single	30	mA
	Series	20	
Peak forward current	Single	150	mA
	Series	110	
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

■ Package

- Code
SSMini3-F3
- Pin Name
1: Anode 1
2: Cathode 2
3: Cathode 1
Anode 2

■ Marking Symbol: M1U

■ Internal Connection



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

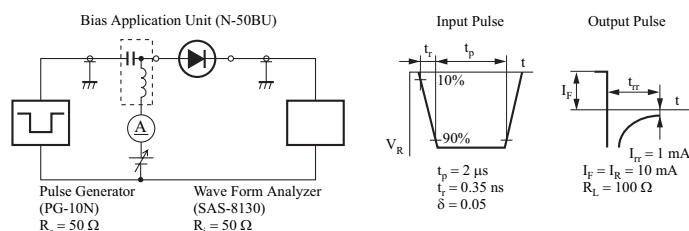
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_{F1}	$I_F = 1 \text{ mA}$			0.4	V
	V_{F2}	$I_F = 30 \text{ mA}$			1.0	
Reverse current	I_R	$V_R = 30 \text{ V}$			300	nA
Terminal capacitance	C_t	$V_R = 1 \text{ V}, f = 1 \text{ MHz}$		1.5		pF
Reverse recovery time *	t_{rr}	$I_F = I_R = 10 \text{ mA}, I_{rr} = 1 \text{ mA}$ $R_L = 100 \Omega$		1.0		ns
Detection efficiency	η	$V_{IN} = 3 \text{ V}_{(peak)}, f = 30 \text{ MHz}$ $R_L = 3.9 \text{ k}\Omega, C_L = 10 \text{ pF}$		65		%

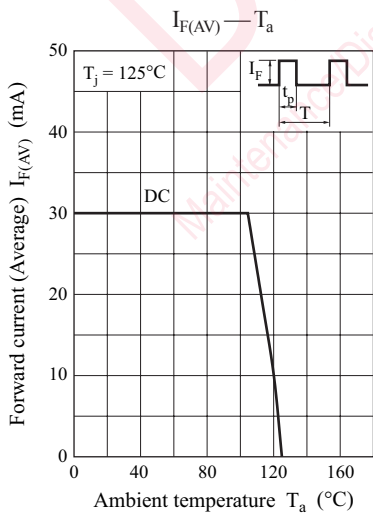
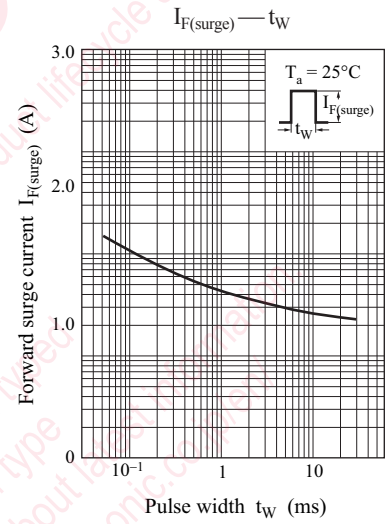
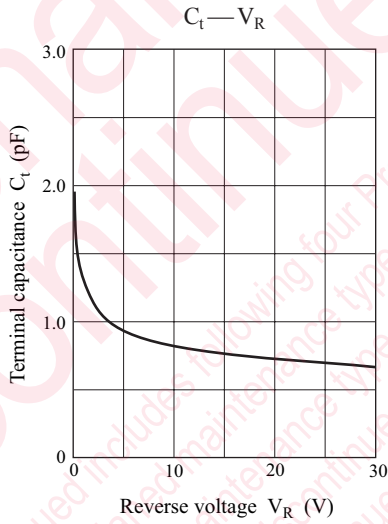
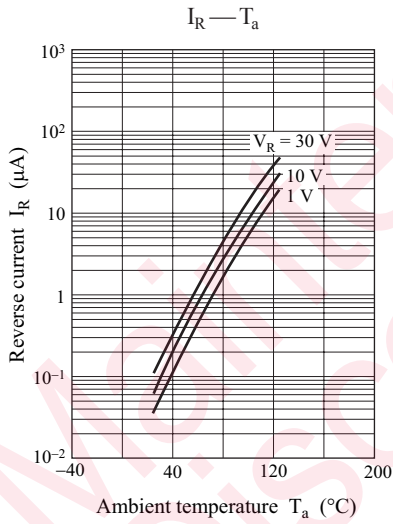
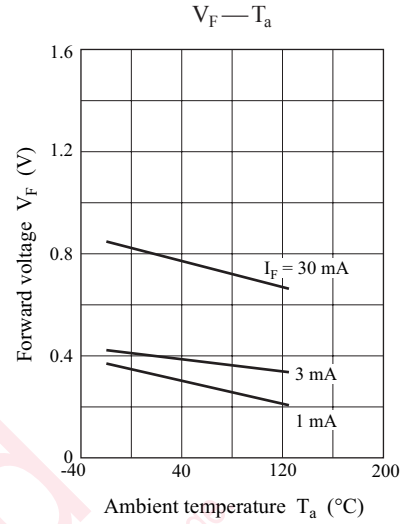
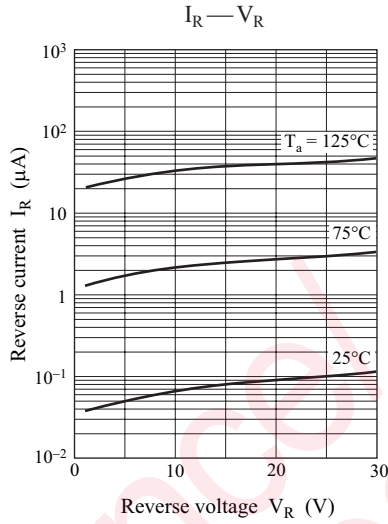
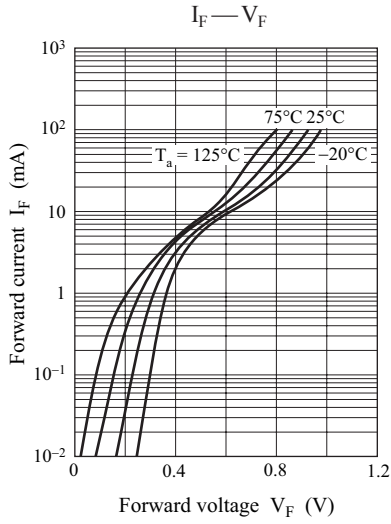
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. Absolute frequency of input and output is 2000 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.

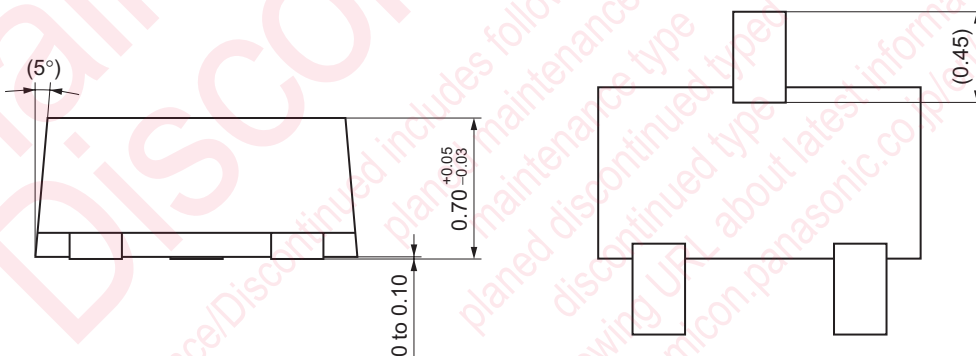
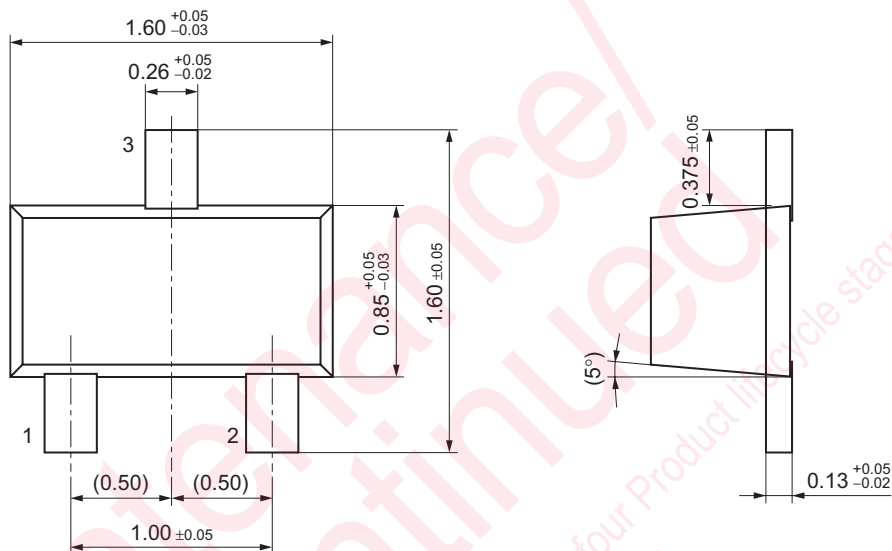
3. *: t_{rr} measurement circuit





SSMini3-F3

Unit: mm



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