

# MA21D38

## Silicon epitaxial planar type

For high frequency rectification

### ■ Features

- $I_{F(AV)} = 1$  A rectification is possible
- Low forward voltage  $V_F$
- High non-repetitive peak forward surge voltage

### ■ 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 (Average)	$I_{F(AV)}$	1.0	A
Non-repetitive peak forward surge current *	$I_{FSM}$	20	A
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage time	$T_{stg}$	-55 to +125	$^\circ\text{C}$

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

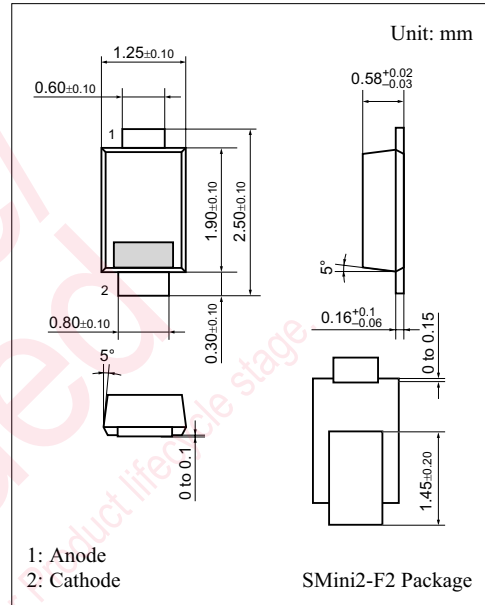
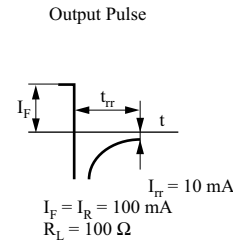
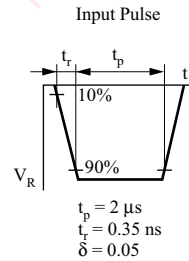
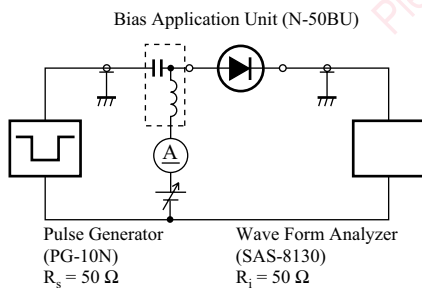
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_{F1}$	$I_F = 0.5$ A		0.34	0.38	V
	$V_{F2}$	$I_F = 0.7$ A		0.36	0.40	
	$V_{F3}$	$I_F = 1.0$ A		0.38	0.42	
Reverse current	$I_R$	$V_R = 30$ V			100	$\mu\text{A}$
Terminal capacitance	$C_t$	$V_R = 10$ V, $f = 1$ MHz		40		pF
Reverse recovery time *	$t_{rr}$	$I_F = I_R = 100$ mA, $I_{rr} = 10$ mA, $R_L = 100 \Omega$		13		ns

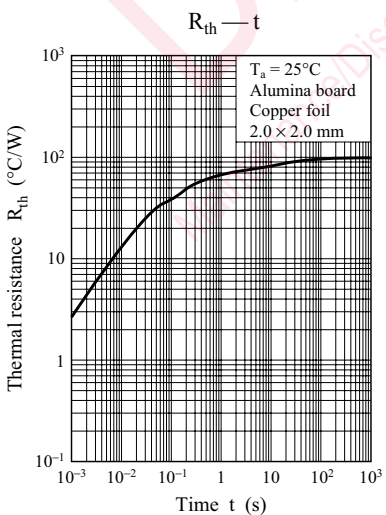
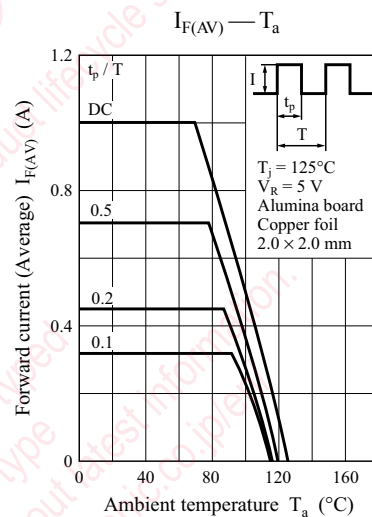
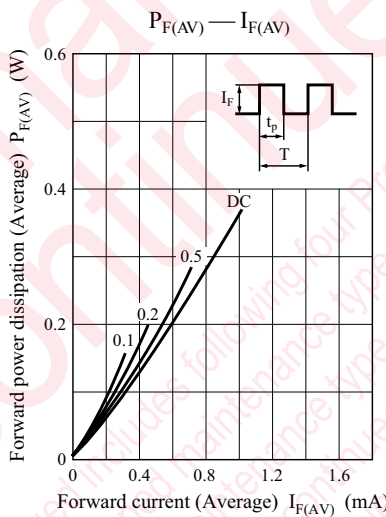
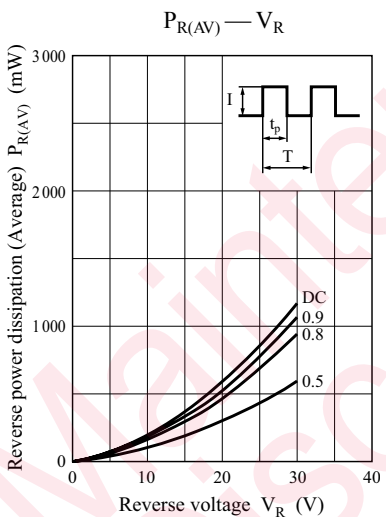
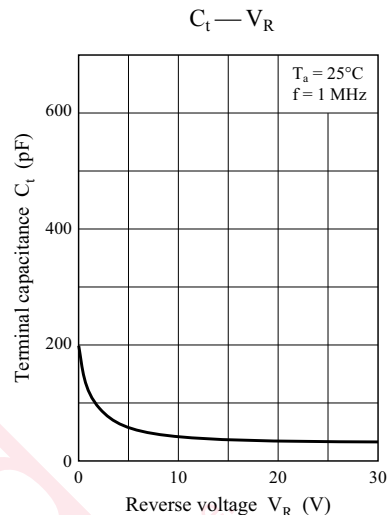
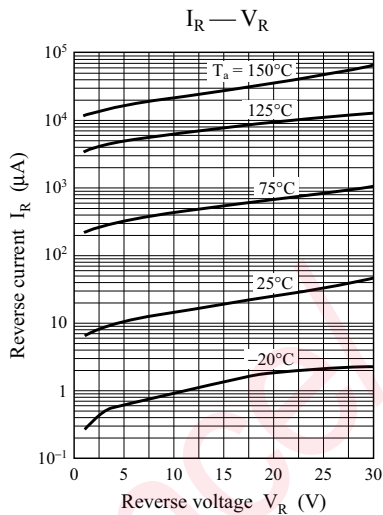
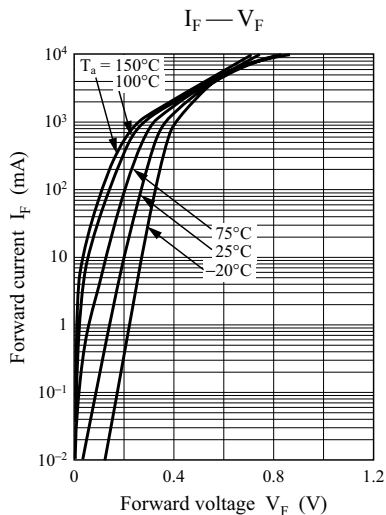
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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



Marking Symbol: 3U



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