

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)

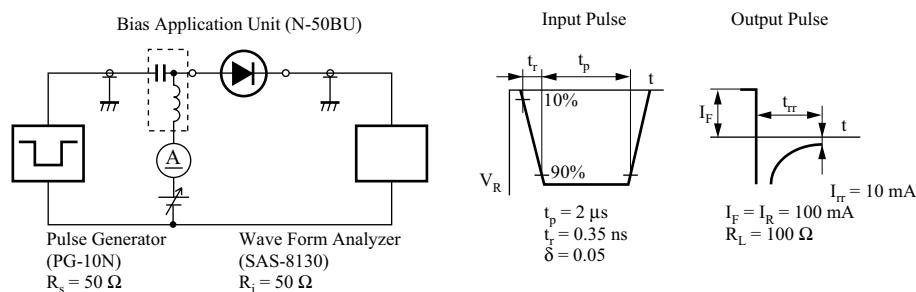
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

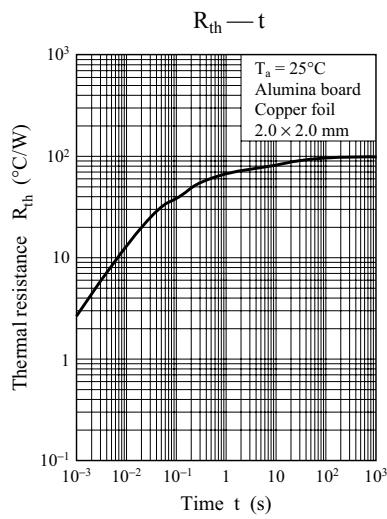
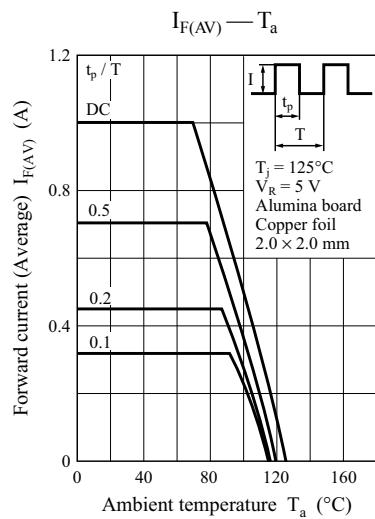
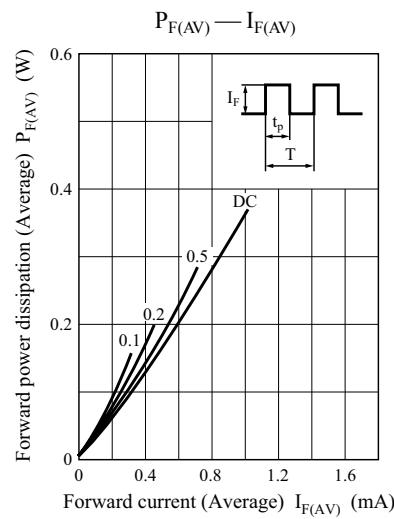
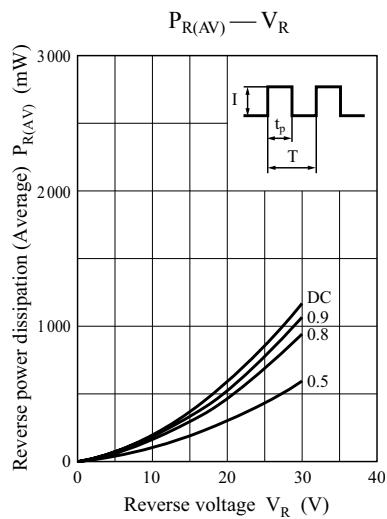
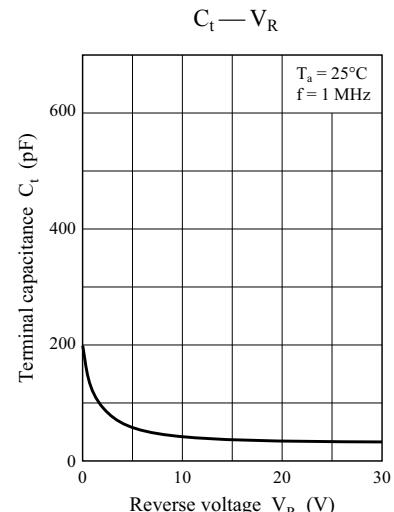
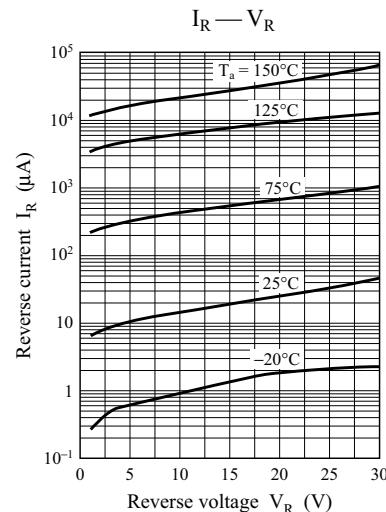
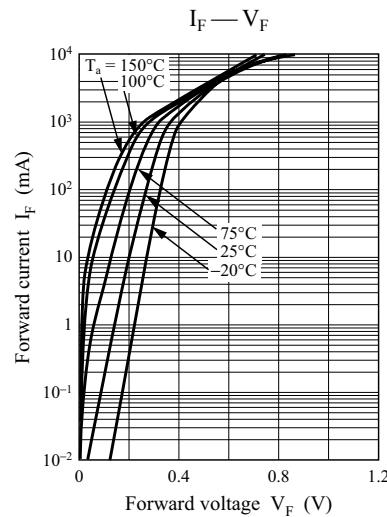
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_{F1}	$I_F = 0.5$ A		0.34	0.38	V
	V_{F2}	$I_F = 0.7$ A		0.36	0.40	
	V_{F3}	$I_F = 1.0$ A		0.38	0.42	
Reverse current	I_R	$V_R = 30$ V			100	μA
Terminal capacitance	C_t	$V_R = 10$ V, $f = 1$ MHz		40		pF
Reverse recovery time *	t_{rr}	$I_F =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





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