

MA27D30

Silicon epitaxial planar type

For super high speed switching

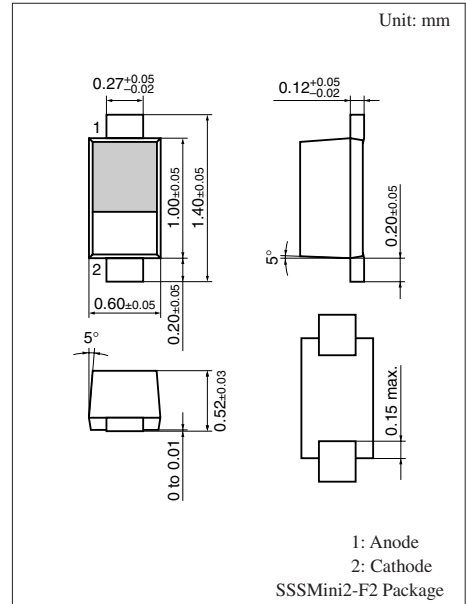
■ Features

- Small reverse current: $I_R < 2 \mu\text{A}$ (at $V_R = 30 \text{ V}$)
- Optimum for high frequency rectification because of its short reverse recovery time t_{rr} .

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

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}	200	mA
Non-repetitive peak forward surge current *	I_{FSM}	1	A
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

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



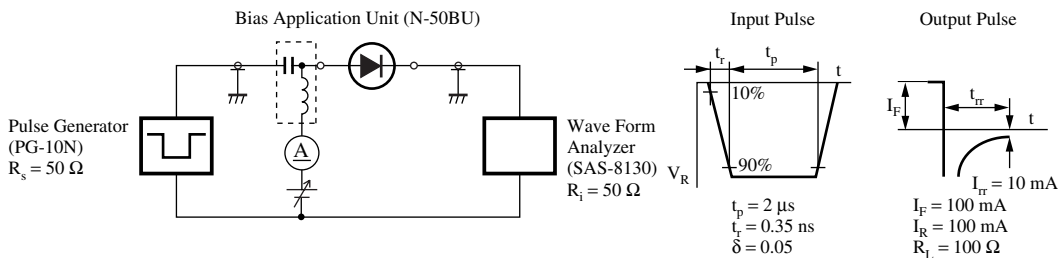
Marking Symbol: 8N

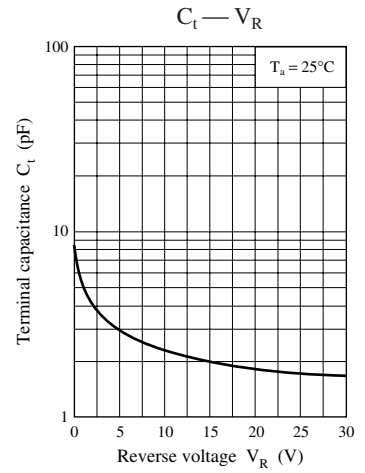
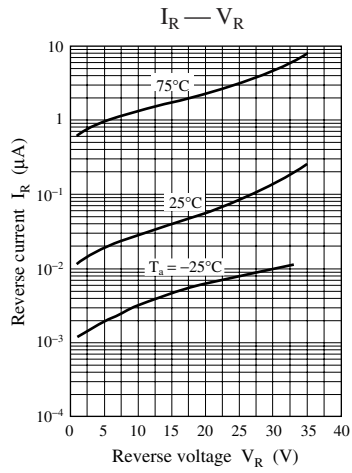
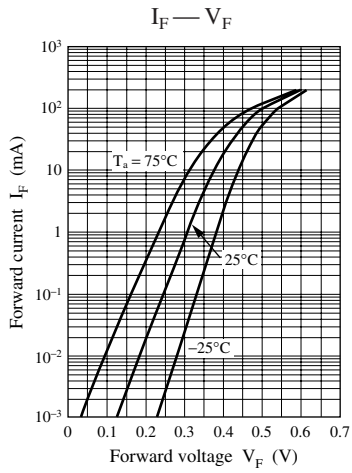
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_{F1}	$I_F = 10 \text{ mA}$		0.38	0.44	V
	V_{F2}	$I_F = 100 \text{ mA}$		0.51	0.58	V
Reverse current	I_{R1}	$V_R = 10 \text{ V}$			0.3	μA
	I_{R2}	$V_R = 30 \text{ V}$			2	μA
Terminal capacitance	C_t	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$		9		pF
Reverse recovery time *	t_{rr}	$I_F = I_R = 100 \text{ mA}$ $I_{rr} = 10 \text{ mA}, R_L = 100 \Omega$		1		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





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