

# MA27784

## Silicon epitaxial planar type

For high-speed switching circuits

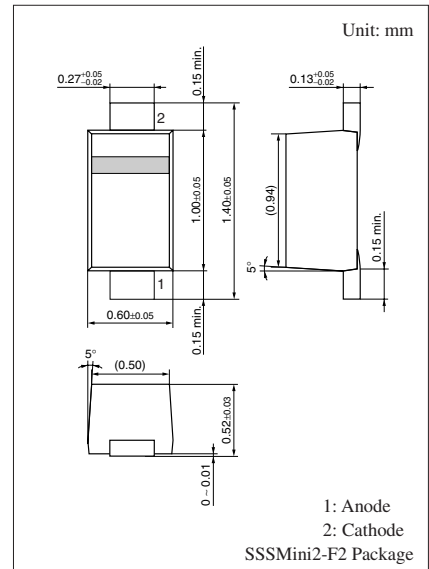
### ■ Features

- High-density mounting is possible
- Low forward voltage  $V_F$  and good rectification efficiency
- Optimum for high frequency rectification because of its short reverse recovery time ( $t_{rr}$ )
- SSS-Mini type 2-pin package

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

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	$V_R$	30	V
Repetitive peak reverse voltage	$V_{RRM}$	30	V
Average forward current	$I_{F(AV)}$	100	mA
Peak forward current	$I_{FM}$	300	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)



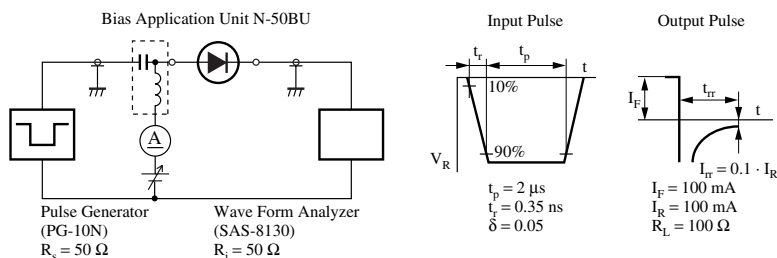
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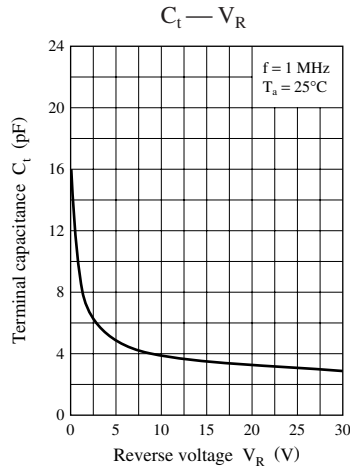
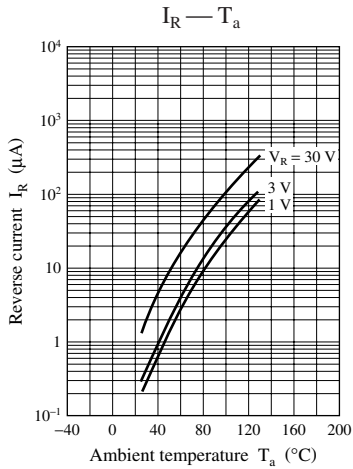
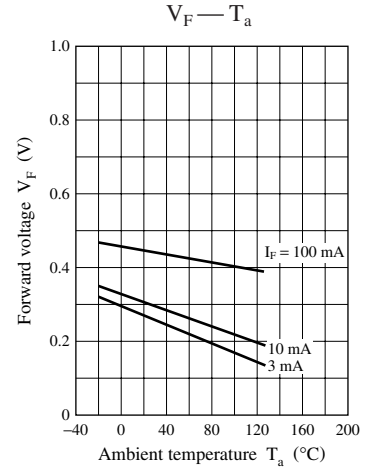
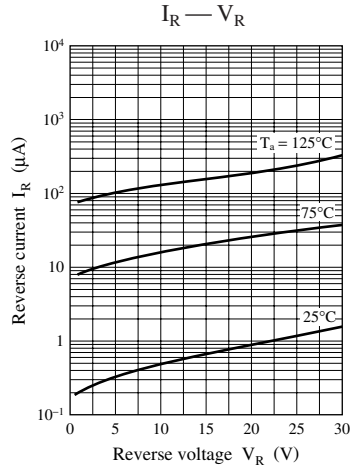
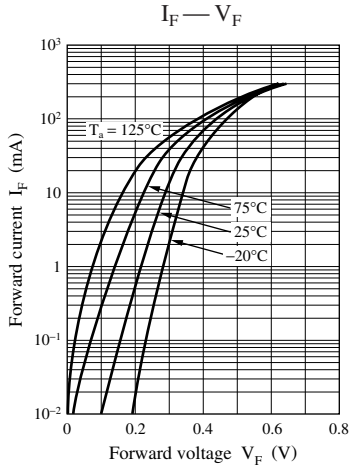
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	$I_R$	$V_R = 30\text{ V}$			15	nA
Forward voltage (DC)	$V_F$	$I_F = 100\text{ mA}$			0.55	V
Terminal capacitance	$C_t$	$V_R = 0\text{ V}, f = 1\text{ MHz}$		20		pF
Reverse recovery time *	$t_{rr}$	$I_F = I_R = 10\text{ mA}$ $I_{rr} = 0.1 \cdot I_R, R_L = 100\ \Omega$		2.0		ns

Note) 1. 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.

2. Rated input/output frequency: 250 MHz
3. \*:  $t_{rr}$  measuring instrument





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