

MA113

Silicon epitaxial planer type

For switching circuits

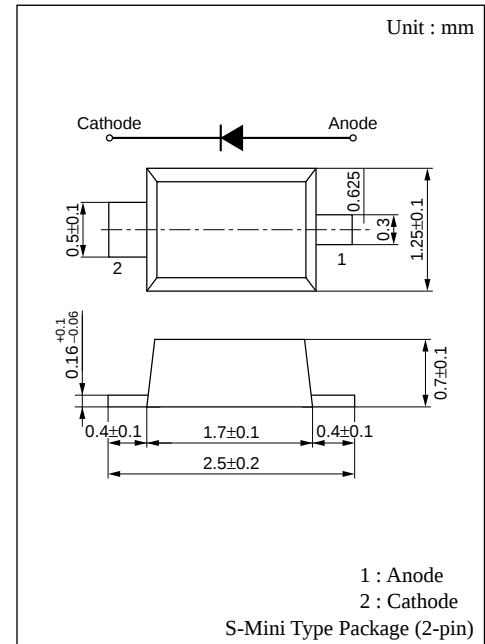
■ Features

- Small S-Mini type package enabling high density mounting
- Securing of the current capacity of the forward current (average)
 $I_{F(AV)} = 200\text{mA}$
- High voltage resistance ($V_R = 80\text{V}$)

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

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	80	V
Peak reverse voltage	V_{RM}	80	V
Forward current (DC)	I_F	200	mA
Peak forward current	I_{FM}	600	mA
Non-repetitive peak forward surge current	I_{FSM}^*	1	mA
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	- 55 to +150	$^\circ\text{C}$

* $t = 1\text{s}$



Marking Symbol : 1D

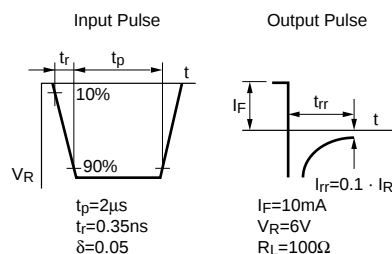
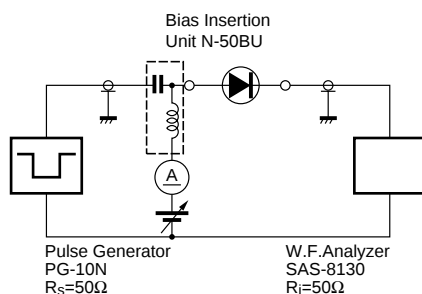
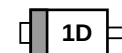
■ Electrical Characteristics ($T_a = 25^\circ\text{C}$)

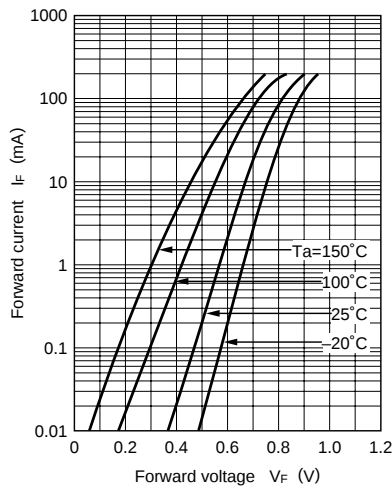
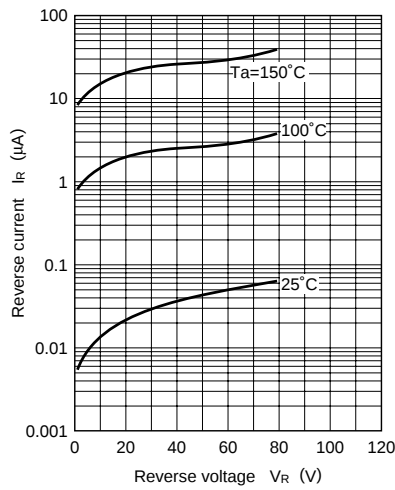
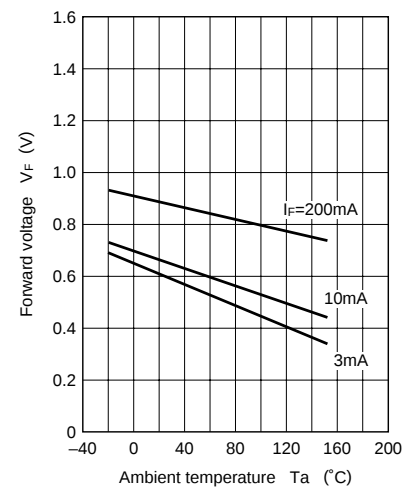
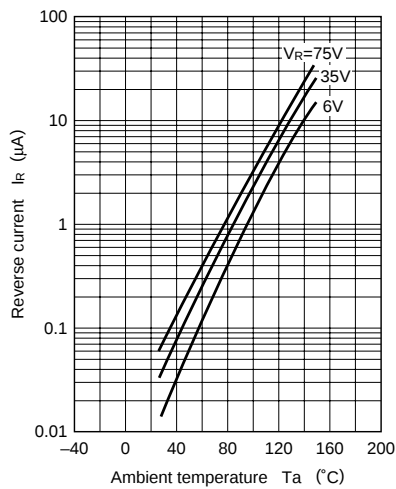
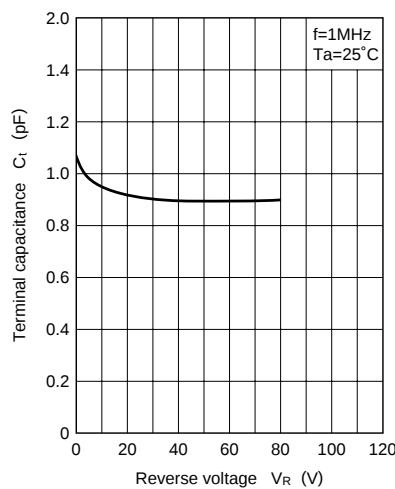
Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	I_{R1}	$V_R = 15\text{V}$			50	nA
	I_{R2}	$V_R = 75\text{V}$			500	nA
	I_{R3}	$V_R = 75\text{V}, T_a = 100^\circ\text{C}$			100	μA
Forward voltage (DC)	V_F	$I_F = 200\text{mA}$			1.1	V
Terminal capacitance	C_t	$V_R = 0\text{V}, f = 1\text{MHz}$			4	pF
Reverse recovery time	t_{rr}^*	$I_F = 10\text{mA}, V_R = 6\text{V}$ $I_{rr} = 0.1 \cdot I_R, R_L = 100\Omega$			10	ns

Note 1. Rated input/output frequency : 100MHz

2. * : t_{rr} measuring circuit

■ Marking



$I_F - V_F$  $I_R - V_R$  $V_F - T_a$  $I_R - T_a$  $C_t - V_R$  $I_F(\text{surge}) - t_w$ 