MA126

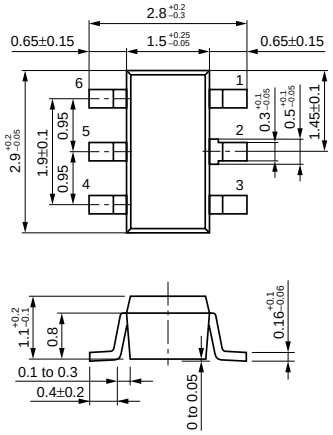
Silicon epitaxial planer type

For switching circuits

■ Features

- Four-element incorporated in one package, enabling high-density mounting
- High voltage resistance V_R : 80V

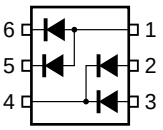
Unit : mm



1 : Anode 3, 4 4 : Cathode 1, 2
2 : Anode 1 5 : Cathode 3
3 : Anode 2 6 : Cathode 4
Mini Type Package (6-pin)

Marking Symbol : M2S

■ Internal Connection



■ Absolute Maximum Ratings (Ta= 25˚C)

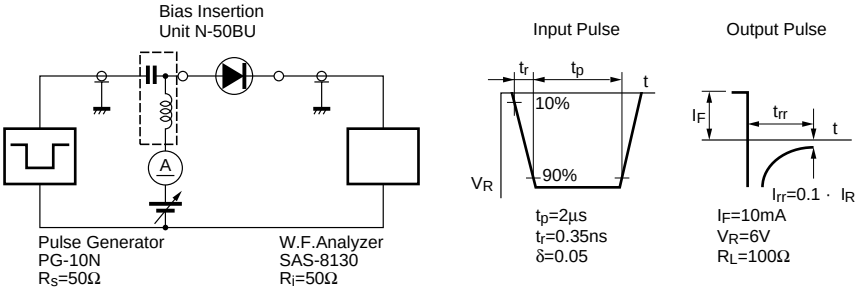
Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	80	V
Peak reverse voltage	V_{RM}	80	V
Forward current (DC)	I_F	❋100	mA
Peak forward current	I_{FM}	❋225	mA
Non-repetitive peak forward surge current	I_{FSM}*	❋500	mA
Junction temperature	T_j	150	˚C
Storage temperature	T_{stg}	– 55 to +150	˚C

❋ Value in single diode used
* t=1s

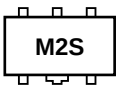
■ Electrical Characteristics (Ta= 25˚C)

Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	I_R	V_R= 75V			100	nA
Forward voltage (DC)	V_F	I_F=100mA			1.2	V
Reverse voltage (DC)	V_R	I_R=100µA	80			V
Terminal capacitance	C_{t1}*1	V_R= 0V, f=1MHz			15	pF
	C_{t2}*2	V_R= 0V, f=1MHz			2	pF
Reverse recovery time	t_{rr1}*1, 3	I_F=10mA, V_R= 6V			10	ns
	t_{rr2}*2, 3	I_{rr}= 0.1 · I_R, R_L=100Ω			3	

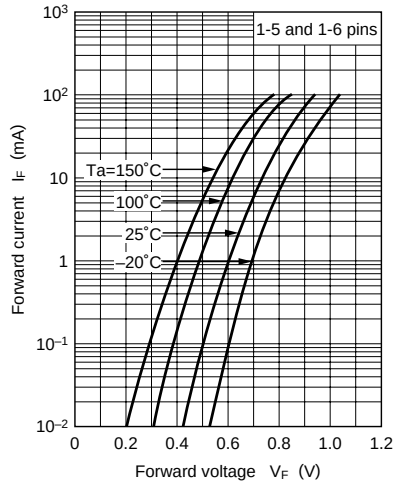
Note 1 : Rated input/output frequency : 100MHz
2 : * 1Between pins 1 and 5 Between pins 1 and 6
* 2 Between pins 4 and 2 Between pins 4 and 3
* t_{rr} measuring circuit



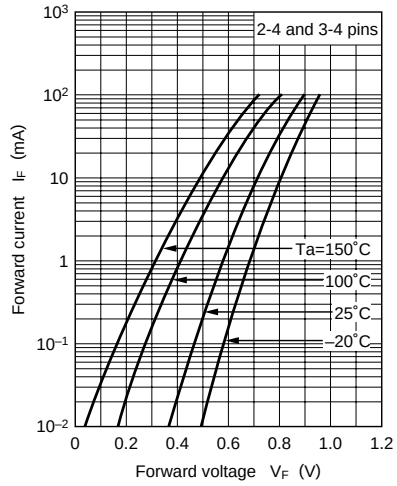
■ Marking



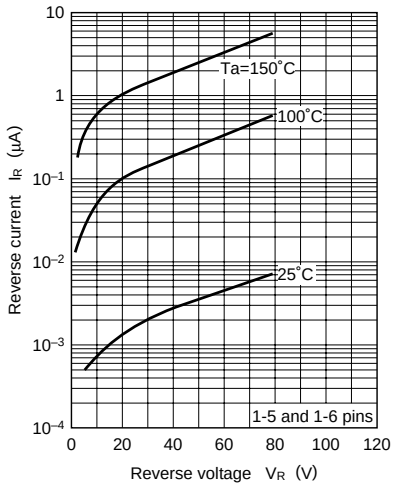
$I_F - V_F$



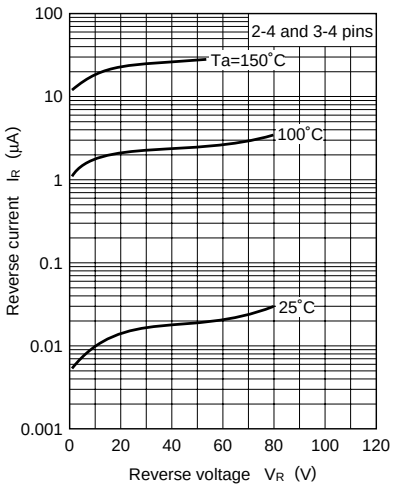
$I_F - V_F$



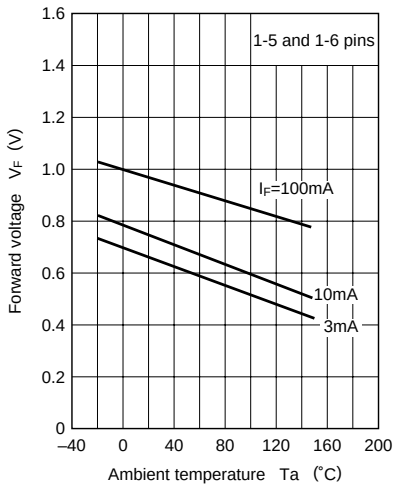
$I_R - V_R$



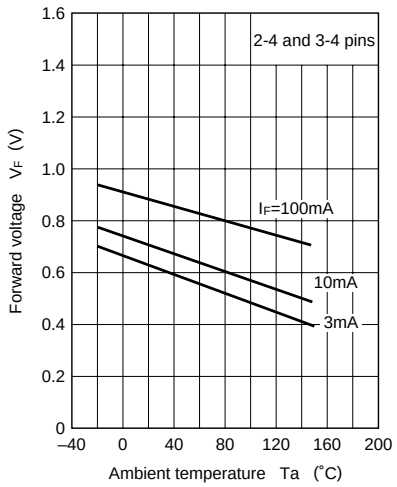
$I_R - V_R$



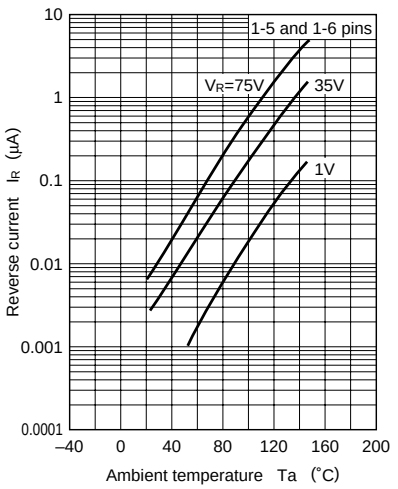
$V_F - Ta$



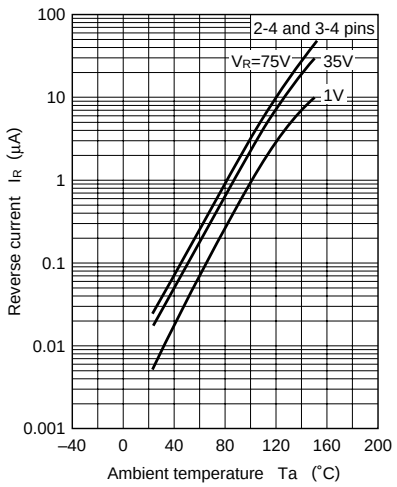
$V_F - Ta$



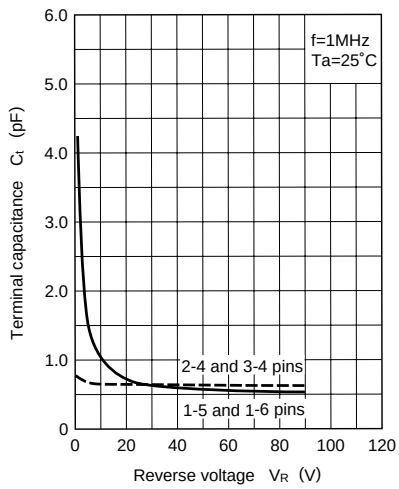
$I_R - Ta$



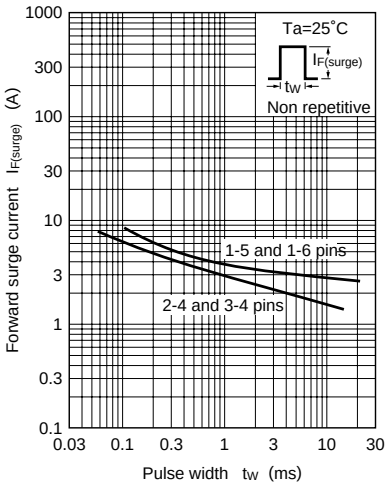
$I_R - Ta$



$C_t - V_R$



$I_{F\ (surge)} - t_W$


Ta=25˚C
IF(surge)
tw
Non repetitive
1-5 and 1-6 pins
2-4 and 3-4 pins
Forward surge current IF(surge) (A)
1000
300
100
30
10
3
1
0.3
0.1
0.03
0.1
0.3
1
3
10
30
Pulse width tw (ms)