

MA6S121

Silicon epitaxial planer type

For switching circuits

■ Features

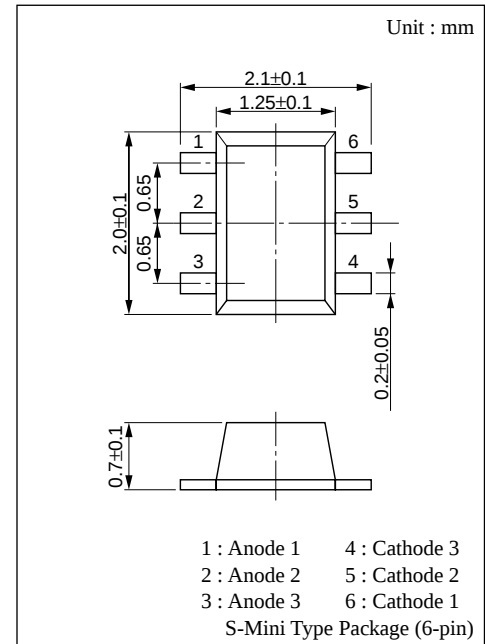
- Small S-Mini type 6-pin package
- Three-element incorporated, enabling high-density mounting
- Flat lead type, with improved mounting efficiency and solderability in the high-speed mounting machine
- Short reverse recovery period t_{rr}
- Small capacity between pins, C_t

■ Absolute Maximum Ratings (Ta= 25°C)

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	80	V
Peak reverse voltage	V_{RM}	80	V
Average forward current	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

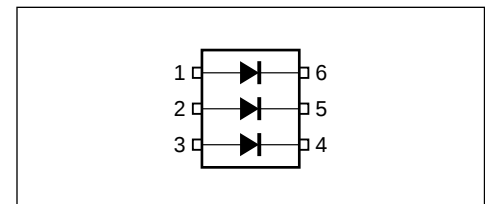
* Value in single diode used

* $t=1s$



Marking Symbol : M2D

■ Internal Connection



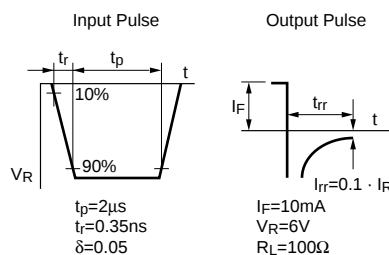
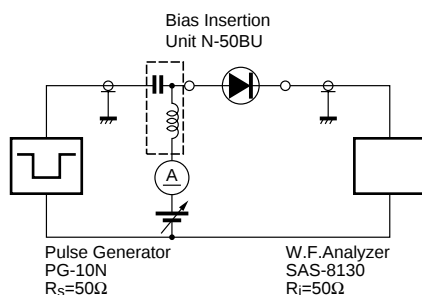
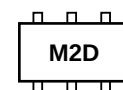
■ Electrical Characteristics (Ta= 25°C)

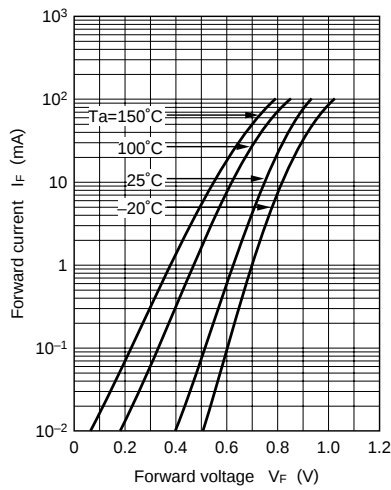
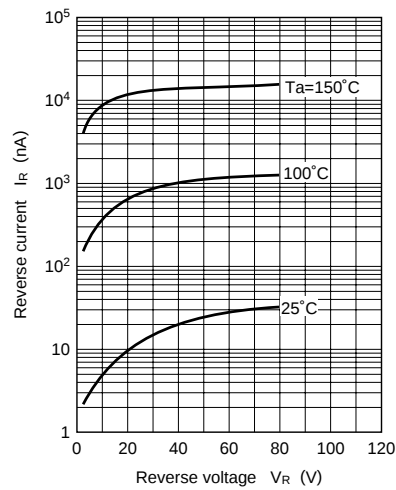
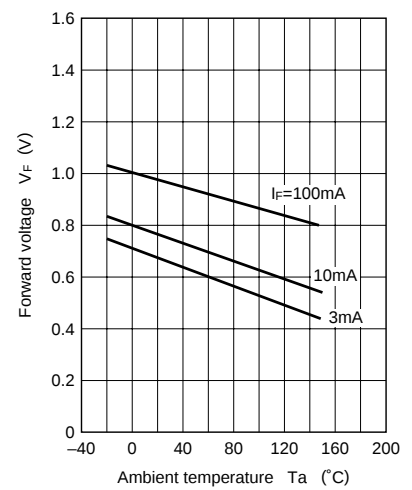
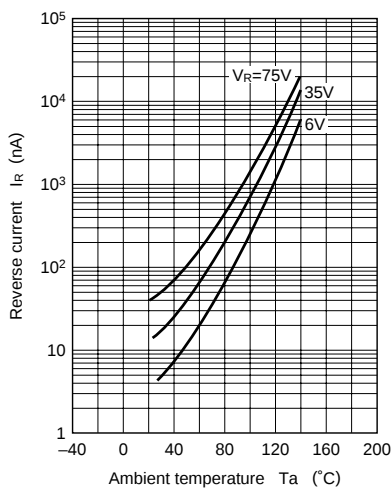
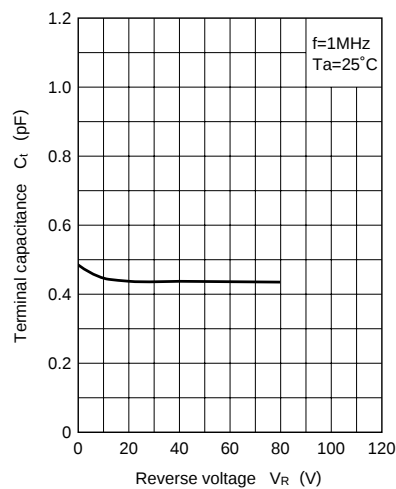
Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	I_R	$V_R = 75V$			0.1	μA
Forward voltage (DC)	V_F	$I_F = 100mA$			1.2	V
Reverse voltage (DC)	V_R	$I_R = 100\mu A$	80			V
Terminal capacitance	C_t	$V_R = 0V, f = 1MHz$			2	pF
Reverse recovery time	t_{rr}^*	$I_F = 10mA, V_R = 6V$ $I_{rr} = 0.1 \cdot I_R, R_L = 100\Omega$			3	ns

Note 1. Rated input/output frequency : 100MHz

2. * : t_{rr} measuring circuit

■ Marking



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