MA6X125 (MA125)

Silicon epitaxial planar type

For switching circuits

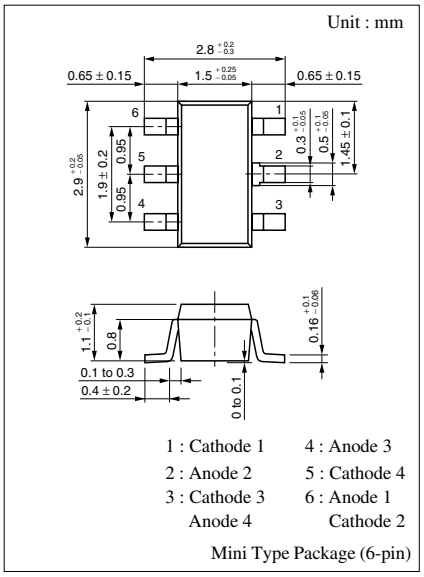
■ Features

- Four-element contained in one package, allowing high-density mounting

■ Absolute Maximum Ratings $T_a = 25°C$

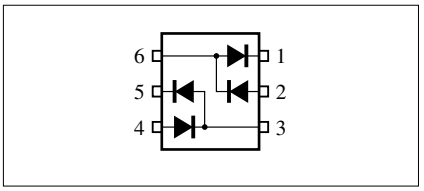
Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	40	V
Peak reverse voltage	V_{RM}	40	V
Forward current (DC)*	I_F	100	mA
Peak forward current*	I_{FM}	200	mA
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	−55 to +150	°C

Note) *1 : Value for single diode



Marking Symbol: M2I

Internal Connection



■ Electrical Characteristics $T_a = 25°C$

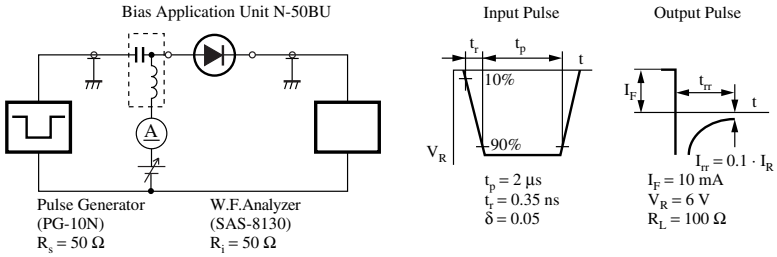
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	V_R = 40 V			100	nA
Forward voltage (DC)	V_F	I_F = 100 mA			1.2	V
Reverse voltage (DC)	V_R	I_R = 100 µA	40			V
Terminal capacitance	C_t	V_R = 0 V, f = 1 MHz			5	pF
Reverse recovery time*3	t_{rr1}*1	I_F = 10 mA, V_R = 6 V		150		ns
	t_{rr2}*2	I_{rr} = 0.1 · I_R, R_L = 100 Ω		90		

Note) 1. Rated input/output frequency: 100 MHz

2. *1 : Between pins 1 and 6, Between pins 3 and 5

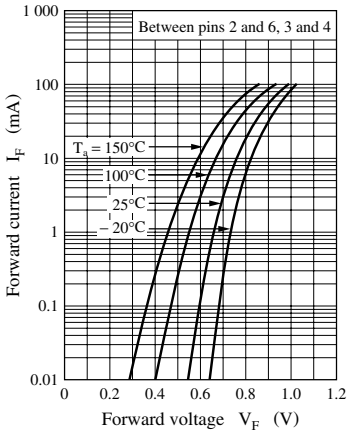
*2 : Between pins 2 and 6, Between pins 3 and 4

*3 : t_{rr} measuring circuit

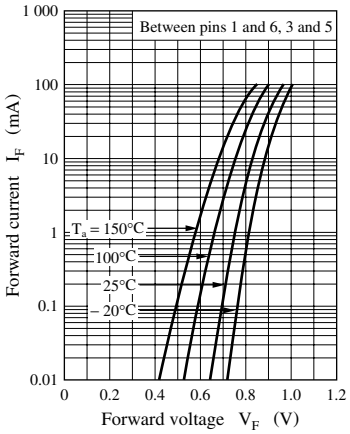


Note) The part number in the parenthesis shows conventional part number.

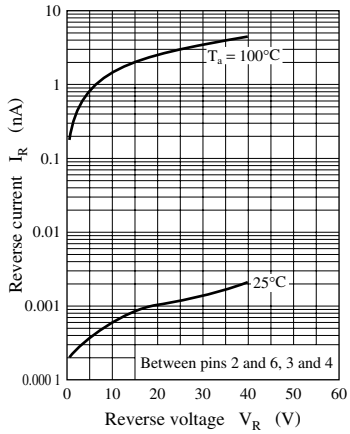
I_F — V_F



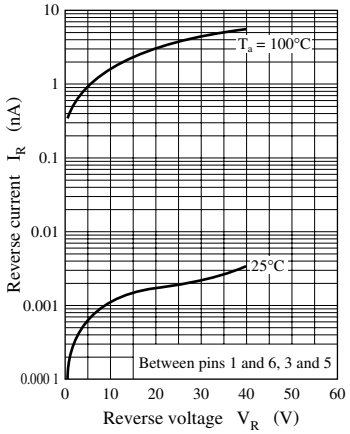
I_F — V_F



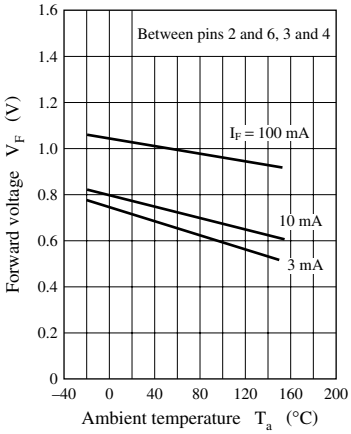
I_R — V_R



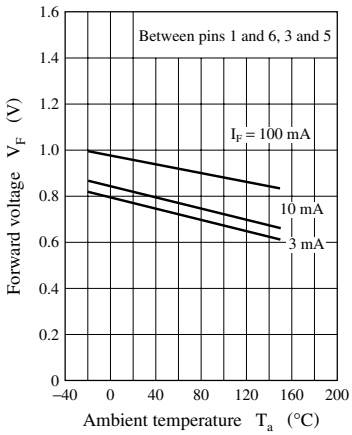
I_R — V_R



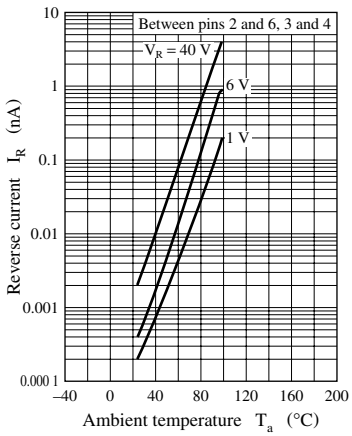
V_F — T_a



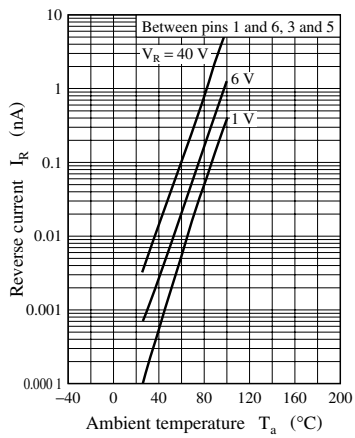
V_F — T_a



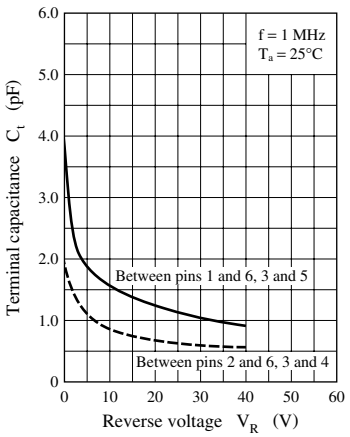
I_R— T_a

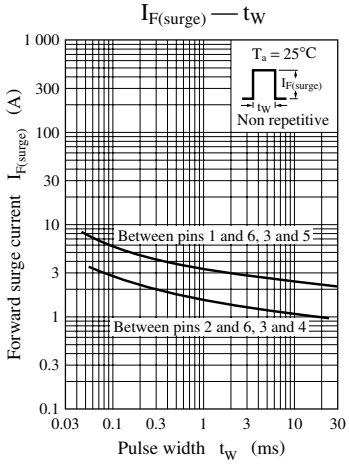


I_R — T_a



C_t — V_R




$I_{F(surge)}$ — t_W
T_a = 25°C
$I_{F(surge)}$
t_W
Non repetitive
Between pins 1 and 6, 3 and 5
Between pins 2 and 6, 3 and 4
Forward surge current $I_{F(surge)}$ (A)
1 000
300
100
30
10
3
1
0.3
0.1
0.03
0.1
0.3
1
3
10
30
Pulse width t_W (ms)

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