

MA1U152A

Silicon epitaxial planer type

For switching circuits

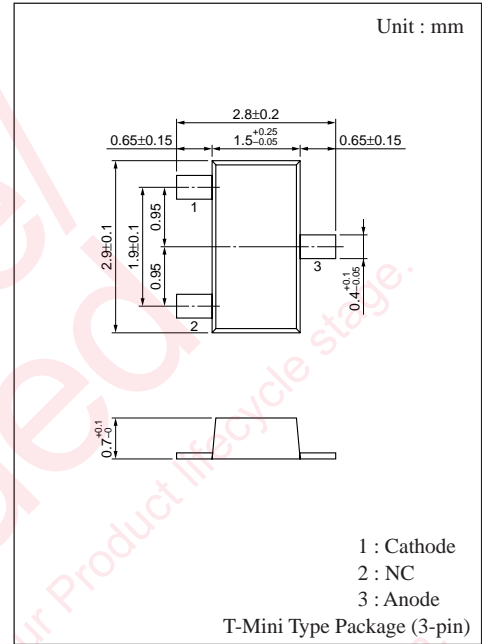
■ Features

- Package thickness as small as 0.7mm, most favorite for thinning of equipment
- 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 ($T_a=25^\circ\text{C}$)

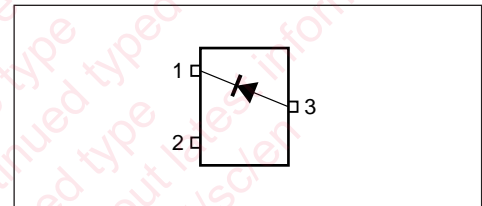
Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	80	V
Peak reverse voltage	V_{RM}	80	V
Forward current (DC)	I_F	100	mA
Peak forward current	I_{FM}	225	mA
Non-repetitive peak forward surge current	I_{FSM}^*	500	mA
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	- 55 to +150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

* $t=1\text{s}$



Marking Symbol : MB

■ Internal Connection

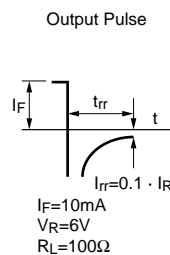
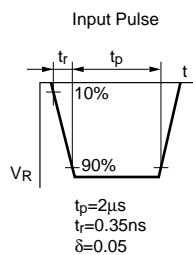
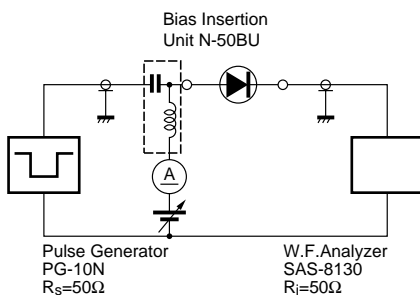


■ Electrical Characteristics ($T_a=25^\circ\text{C}$)

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

Note 1 : Rated input/output frequency : 100MHz

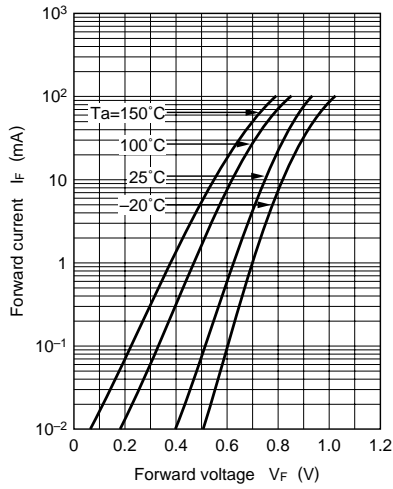
2 : * t_{rr} measuring circuit



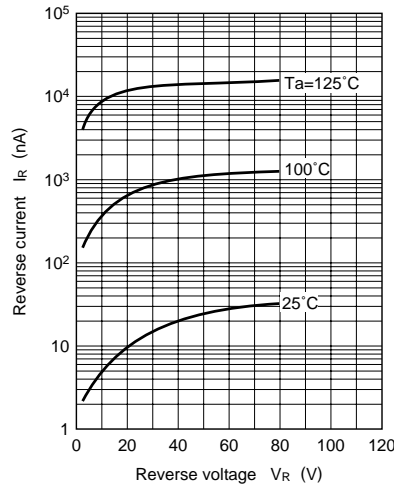
■ Marking



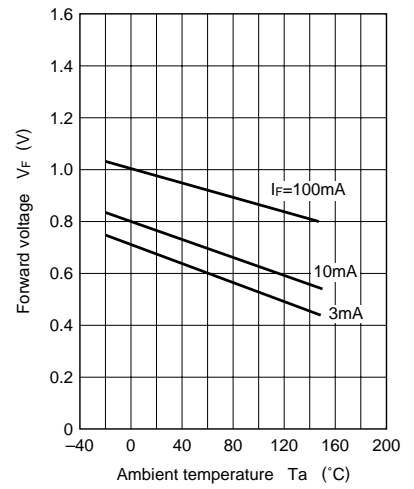
$I_F - V_F$



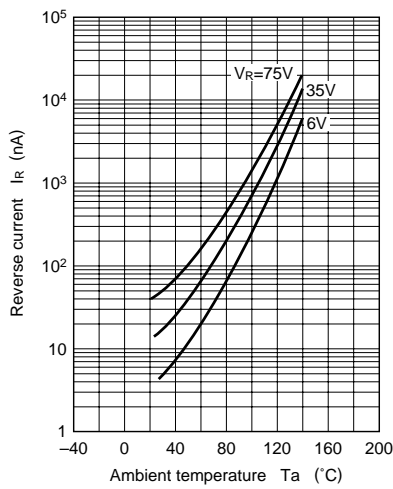
$I_R - V_R$



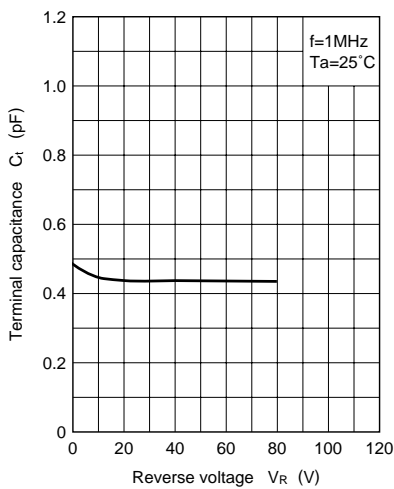
$V_F - T_a$



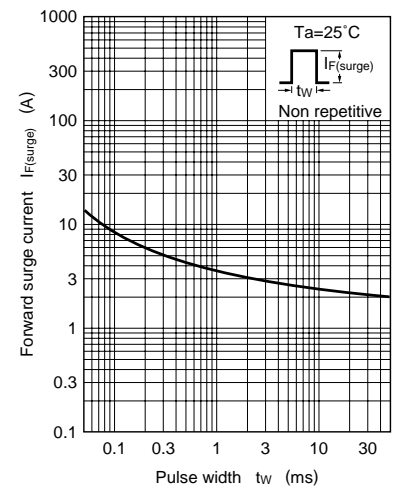
$I_R - T_a$



$C_t - V_R$



$I_F(\text{surge}) - t_w$



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