

MA782

Silicon epitaxial planer type

For super high-speed switching circuit
For small current rectification

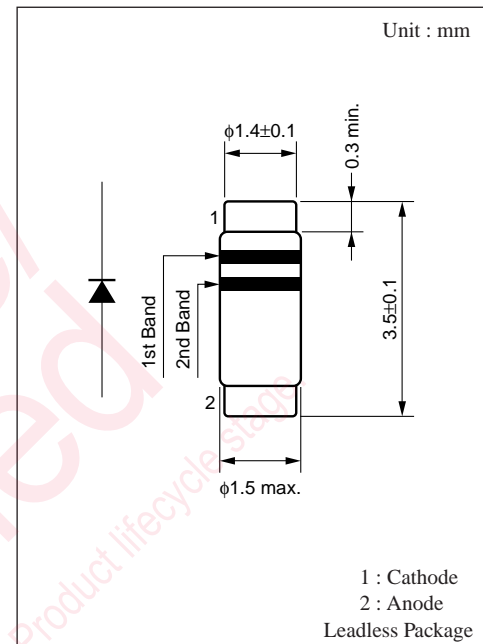
■ Features

- Sealed in the LLD package, enabling high-density mounting
- $I_{F(AV)} = 200\text{mA}$ rectification possible
- Reverse voltage V_R (DC value) = 40V guaranteed

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

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	40	V
Repetitive peak reverse voltage	V_{RRM}	40	V
Peak forward current	I_{FM}	300	mA
Average forward current	$I_{F(AV)}$	200	mA
Non-repetitive peak forward surge current	I_{FSM}^*	1.5	A
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	- 55 to +150	$^\circ\text{C}$

* 50Hz sine wave, one-cycle wave, high value (non-repetitive)



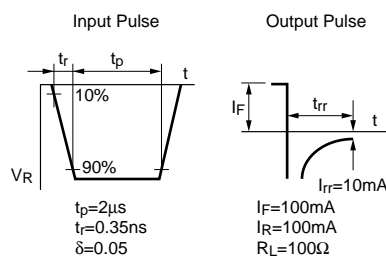
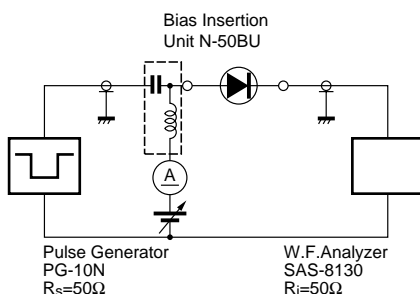
■ Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	I_R	$V_R = 40\text{V}$			15	μA
Forward voltage (DC)	V_F	$I_F = 200\text{mA}$			0.55	V
Terminal capacitance	C_t	$V_R = 0\text{V}, f = 1\text{MHz}$		30		pF
Reverse recovery time	t_{rr}^*	$I_F = I_R = 100\text{mA}$ $I_{rr} = 10\text{mA}, R_L = 100\Omega$		3		ns

Note 1. Schottky barrier diode is sensitive to electric shock (static electricity, etc.). Due attention must be paid on charge of a human body and leakage from the equipment used.

2. Rated input/output frequency : 1000MHz

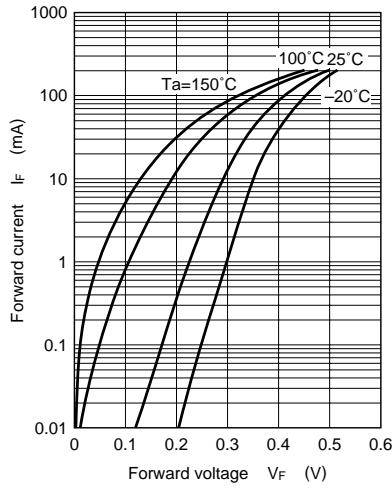
3. * t_{rr} measuring circuit



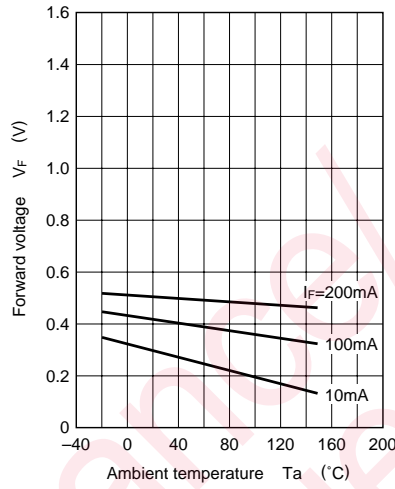
■ Cathode Indication

Type No.	MA782	
Color	1st Band	Pink
	2nd Band	Yellow

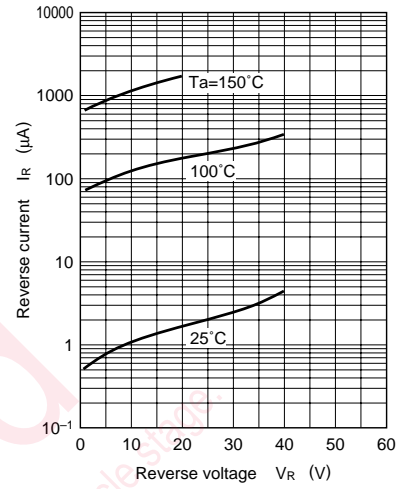
$I_F - V_F$



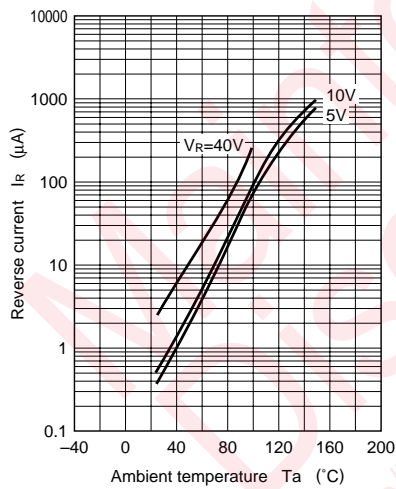
$V_F - T_a$



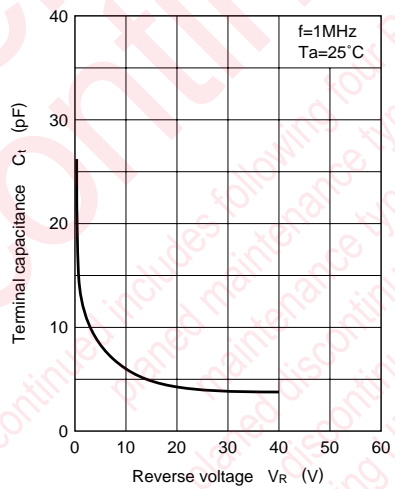
$I_R - V_R$



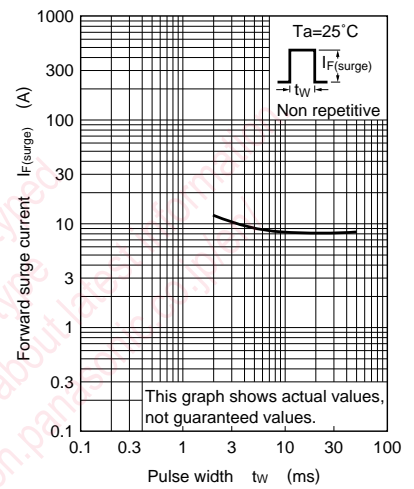
$I_R - T_a$



$C_t - V_R$



$I_{F(\text{surge})} - t_w$



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