

MA1U157A

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
- Series connection type

■ Absolute Maximum Ratings (Ta= 25°C)

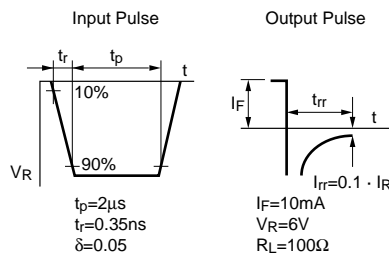
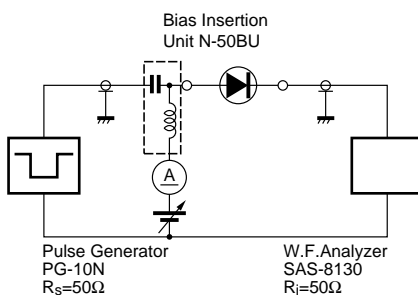
Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	80	V
Peak reverse voltage	V_{RM}	80	V
Forward current (DC)	Single	100	mA
	Series	65	
Peak forward current	Single	225	mA
	Series	145	
Non-repetitive peak forward surge current	Single	500	mA
	Series	325	
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	- 55 to +150	°C

* t=1s

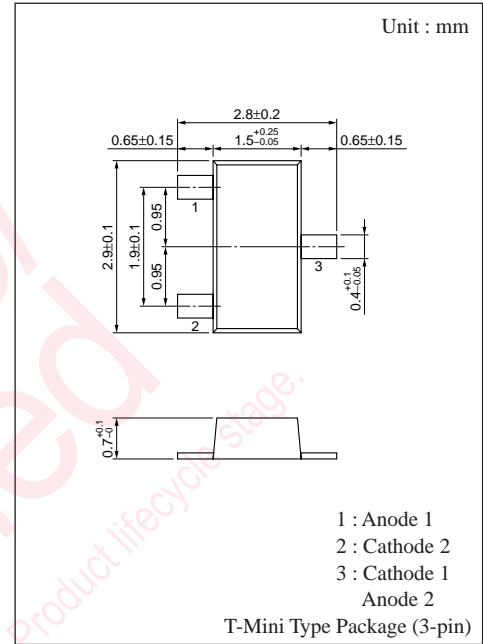
■ Electrical Characteristics (Ta= 25°C)

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

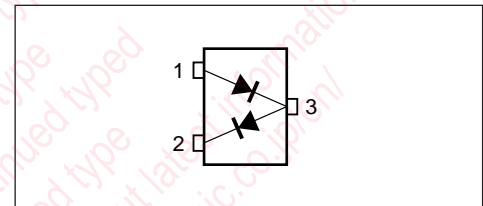


■ Marking

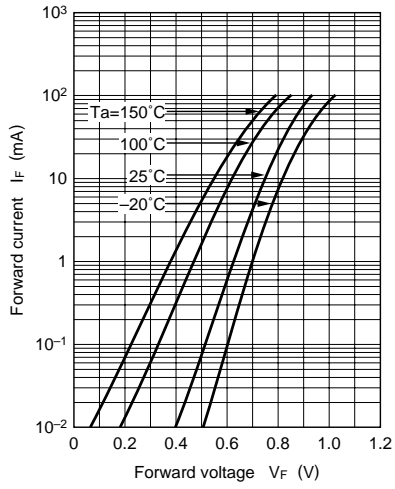


Marking Symbol : MS

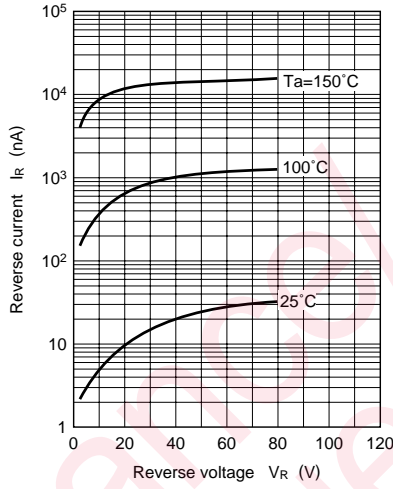
■ Internal Connection



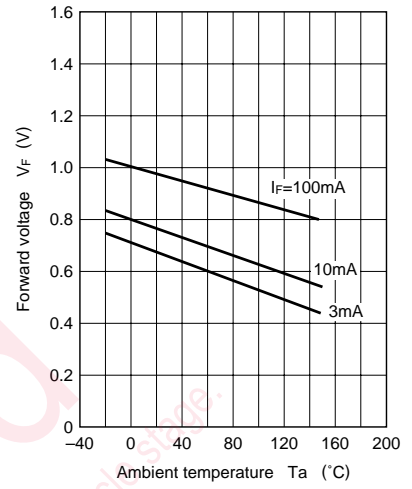
$I_F - V_F$



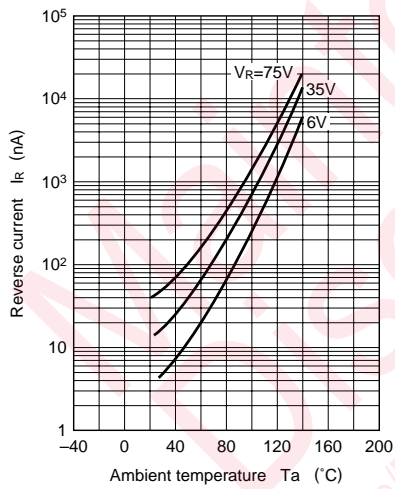
$I_R - V_R$



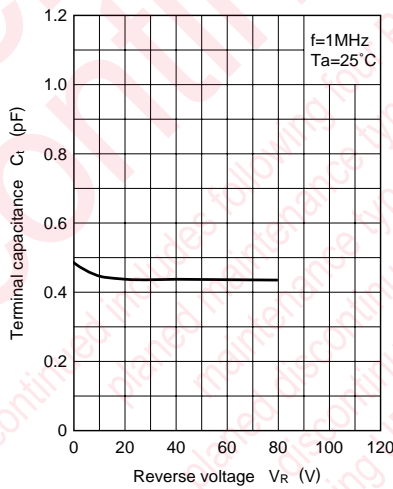
$V_F - T_a$



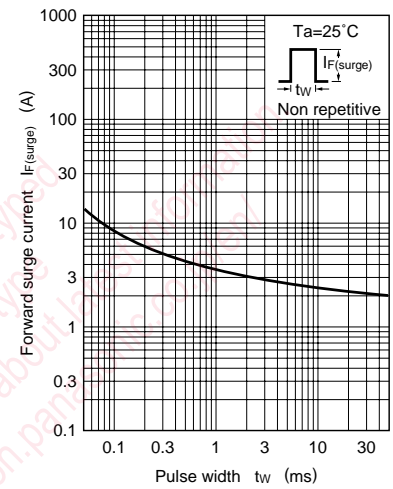
$I_R - T_a$



$C_t - V_R$



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



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