

# MA1U152K

Silicon epitaxial planer type

For switching circuits

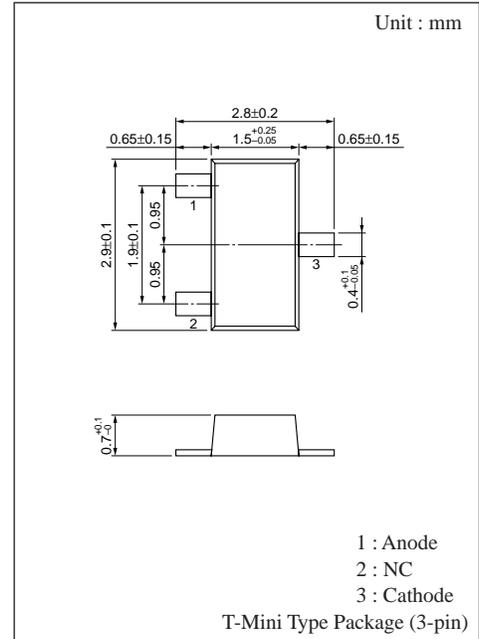
## ■ Features

- 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 ( $T_a=25^\circ\text{C}$ )

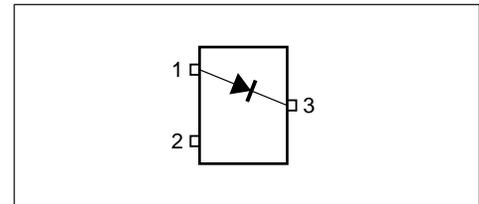
Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	$V_R$	80	V
Peak reverse voltage	$V_{RM}$	80	V
Forward current (DC)	$I_F$	100	mA
Peak forward current	$I_{FM}$	225	mA
Non-repetitive peak forward surge current	$I_{FSM}^*$	500	mA
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$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

\*  $t=1\text{s}$



Marking Symbol : MI

## ■ Internal Connection

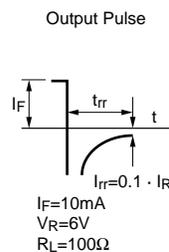
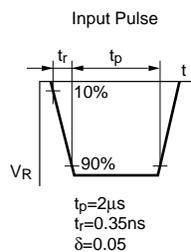
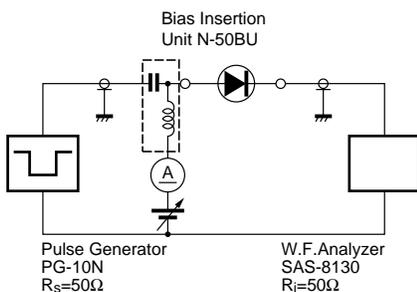


## ■ Electrical Characteristics ( $T_a=25^\circ\text{C}$ )

Parameter	Symbol	Condition	min	typ	max	Unit
Reverse current (DC)	$I_R$	$V_R=75\text{V}$			0.1	$\mu\text{A}$
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

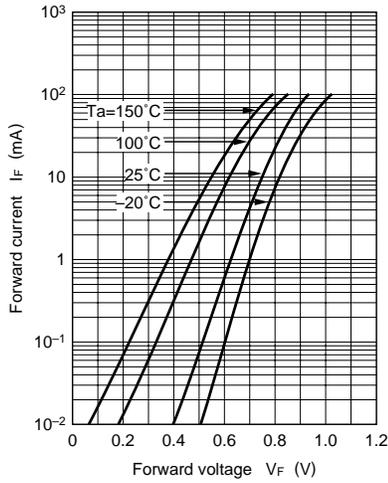
2 : \*  $t_{rr}$  measuring circuit



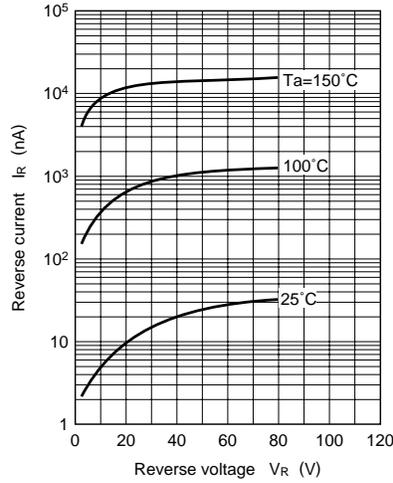
## ■ Marking



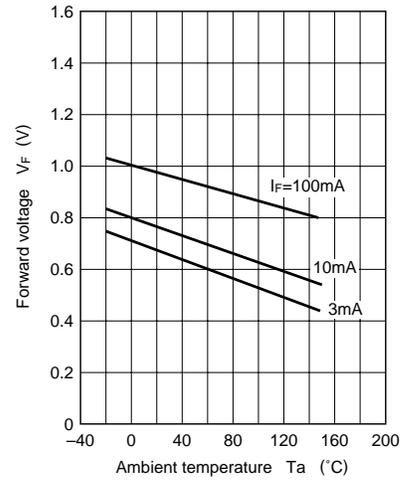
$I_F - V_F$



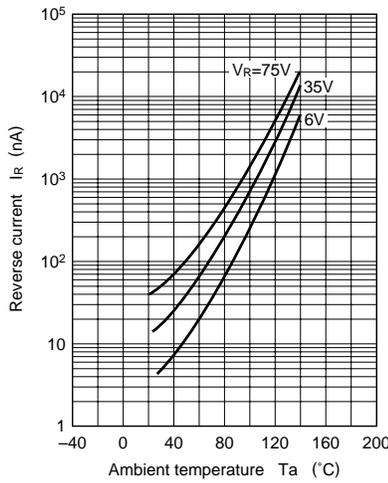
$I_R - V_R$



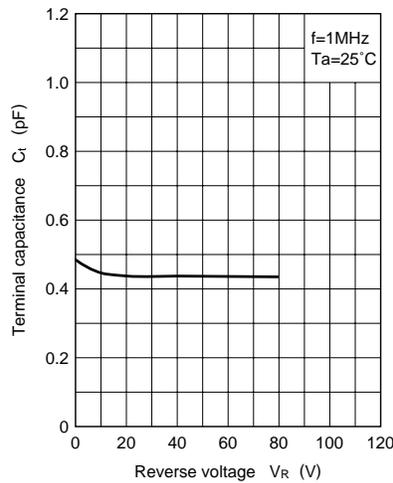
$V_F - T_a$



$I_R - T_a$



$C_t - V_R$



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

