

# MA3100WA

Silicon planer type

Constant voltage, constant current, waveform clipper and surge absorption circuit

## ■ Features

- Mini type package (3-pin)
- Two anode-common wiring of MA3120

## ■ Absolute Maximum Ratings (Ta= 25°C)

Parameter	Symbol	Rating	Unit
Average forward current	$I_{F(AV)}$	100 *1	mA
Instantaneous forward current	$I_{FRM}$	200 *1	mA
Total power dissipation	$P_{tot}$ *2	100 *1	mW
Non-repetitive reverse surge power dissipation	$P_{ZSM}$ *3	15	W
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	- 55 to + 150	°C

\*1 Working value in a single piece

\*2 With a printed-circuit board

\*3  $t=100\mu s, T_j=150^\circ C$

## ■ Electrical Characteristics (Ta= 25°C)\*1

Parameter	Symbol	Condition	min	typ	max	Unit
Forward voltage	$V_F$	$I_F=10mA$		0.8	0.9	V
Zener voltage	$V_Z$ *2	$I_Z= 5mA$	11.4	12.0	12.7	V
Operating resistance	$R_{ZK}$	$I_Z= 0.5mA$			170	$\Omega$
	$R_Z$	$I_Z= 5mA$		10	25	$\Omega$
Reverse current	$I_{R1}$	$V_R= 8.0V$			0.1	$\mu A$
	$I_{R2}$	$V_R= 10.9V$			60	$\mu A$
Temperature coefficient of zener voltage	$S_Z$ *3	$I_Z= 5mA$	6.0	8.4	8.4	$mV/^\circ C$

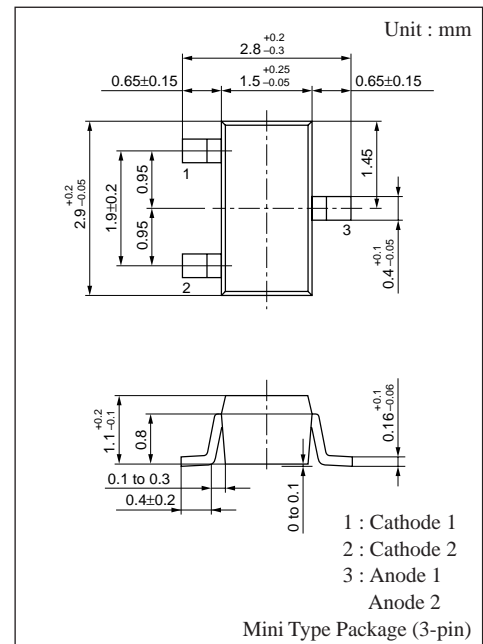
Note 1. Rated input/output frequency : 5MHz

2. \*1 : The  $V_Z$  value is for the temperature of 25°C. In other cases, carry out the temperature compensation.

\*2 : Guaranteed at 20ms after power application

\*3 :  $T_j= 25$  to  $150^\circ C$

## ■ Marking



## ■ Internal Connection

