

MA3200WA

Silicon planer type

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

■ Features

- Mini type package (3-pin)
- Two anode-common wiring of MA3200

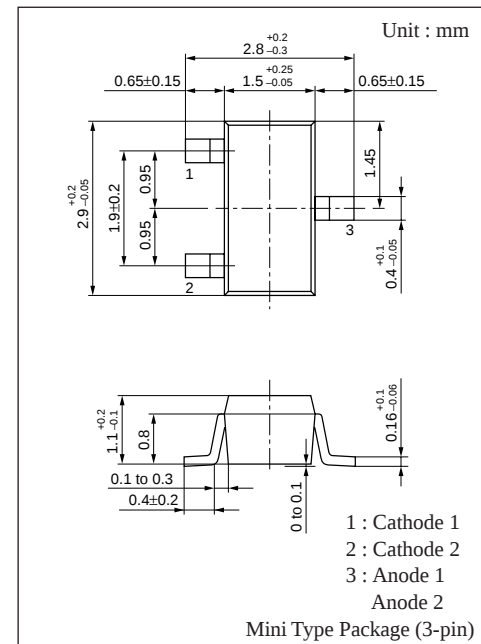
■ Absolute Maximum Ratings (Ta= 25°C)

Parameter	Symbol	Rating	Unit
Average forward current	$I_{F(AV)}$	100 * ¹	mA
Instantious 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

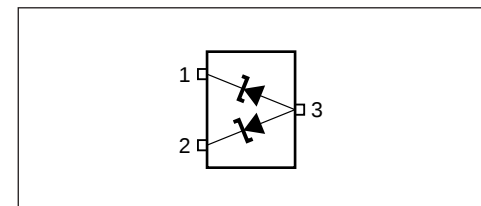
*¹ Working value in a single piece

*² With a printed-circuit board

*³ $t=100\mu s$, $T_j=150^\circ C$



■ Internal Connection



■ 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	$I_Z= 5mA$	18.8	20.0	21.2	V
Operating resistance	R_{ZK}	$I_Z= 0.5mA$			180	Ω
	R_Z	$I_Z= 5mA$		15	55	Ω
Reverse current	I_{R1}	$V_R= 14V$			0.05	μA
	I_{R2}	$V_R= 18.3V$			60	μA
Temperature coefficient of zener voltage	S_Z * ³	$I_Z= 5mA$	14.4	16.4	18.0	mV/°C
Terminal capacitance	C_t	$V_R= 0V$, $f=1MHz$		36	60	pF

Note 1. Rated input/output frequency : 5MHz

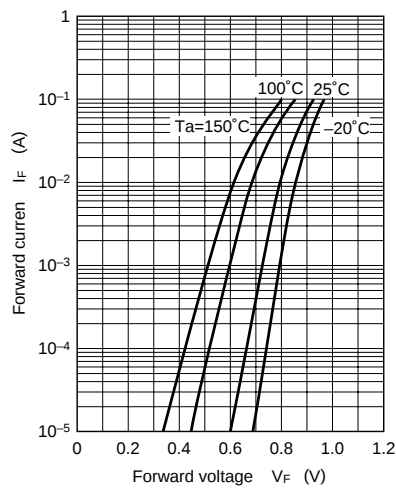
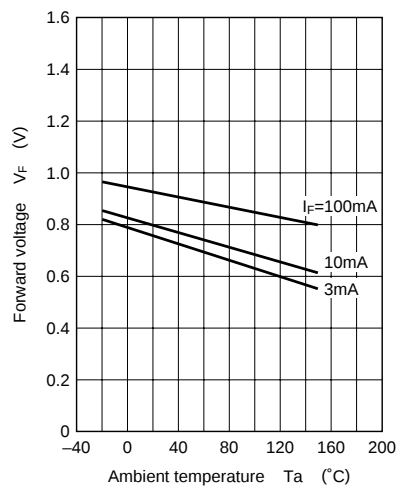
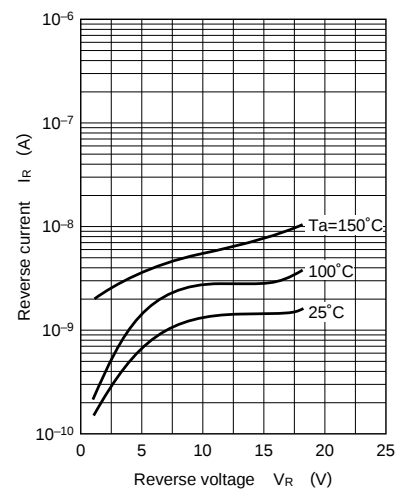
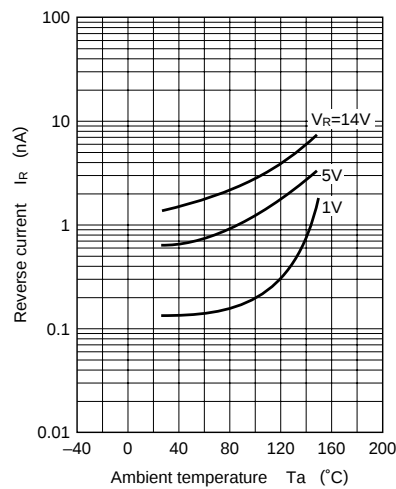
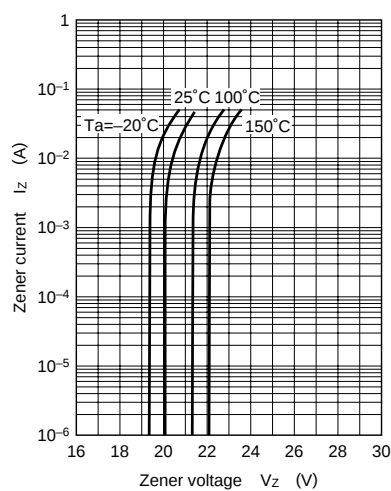
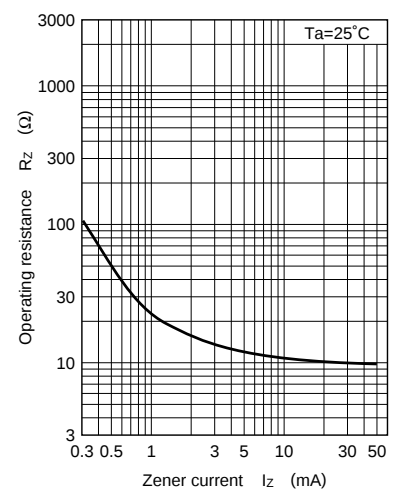
2. *¹ : The V_Z value is for the temperature of 25°C. In other cases, carry out the temperature compensation.

*² : Guaranteed at 20ms after power application

*³ : $T_j= 25$ to $150^\circ C$

■ Marking



$I_F - V_F$  $V_F - T_a$  $I_R - V_R$  $I_R - T_a$  $I_Z - V_Z$  $R_Z - I_Z$  $C_t - V_R$ 