

MAZK068D

Silicon planer type

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

■ Features

- Mini type package (5-pin)
- Four anode-common element wiring of MA3068

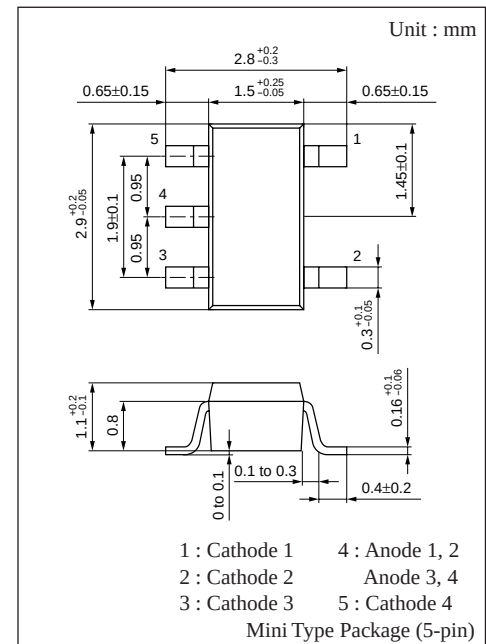
■ Absolute Maximum Ratings (Ta= 25°C)

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

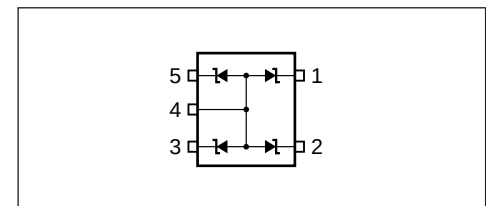
*¹ Working value in a single piece

*² With a printed-circuit board

*³ t=100μs, T_j=150°C



■ Internal Connection



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

Parameter	Symbol	Condition	min	typ	max	Unit
Forward voltage	V_F	$I_F=10\text{mA}$		0.8	0.9	V
Zener voltage	V_Z * ²	$I_Z=5\text{mA}$	6.40	6.80	7.20	V
Operating resistance	R_{ZK}	$I_Z=0.5\text{mA}$			140	Ω
	R_Z	$I_Z=5\text{mA}$		6	15	Ω
Reverse current	I_{R1}	$V_R=4\text{V}$			2	μA
	I_{R2}	$V_R=5.9\text{V}$			60	μA
Temperature coefficient of zener voltage	S_Z * ³	$I_Z=5\text{mA}$	1.2	3.0	4.5	mV/°C
Terminal capacitance	C_t	$V_R=0\text{V}, f=1\text{MHz}$			110	pF

Note 1. Test method : Depend on JIS C7031 testing

2. Rated input/output frequency : 5MHz

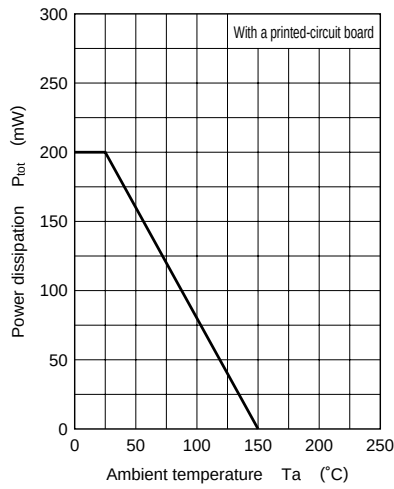
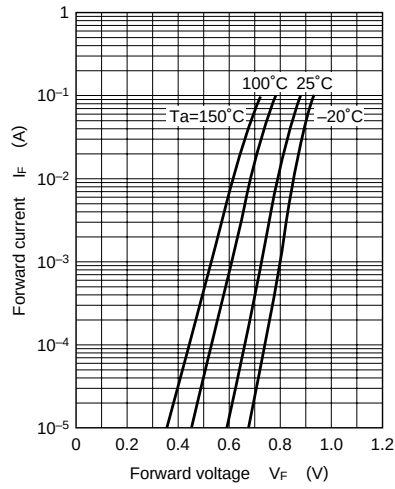
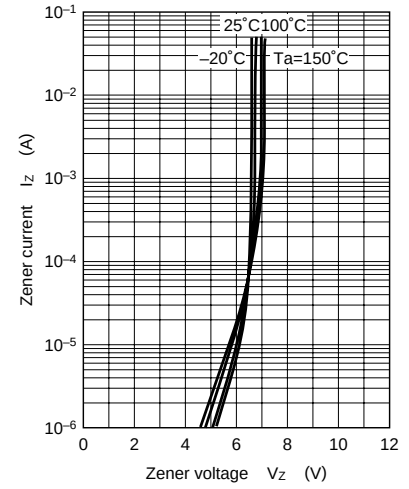
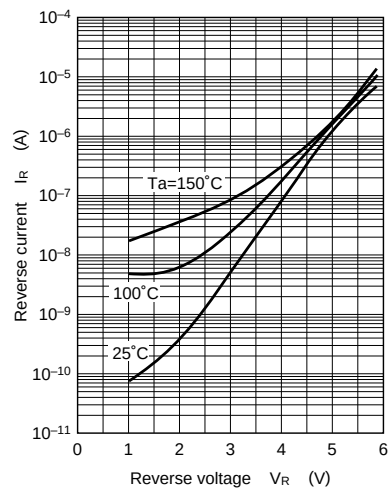
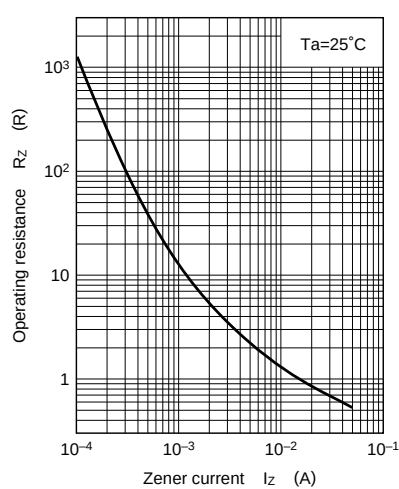
3. *¹ : The V_Z value is for the temperature of 25°C. In other cases, carry out the temperature compensation.

*² : Guaranteed at 20ms after power application

*³ : T_j= 25 to 150°C

■ Marking



$P_{\text{tot}} - T_a$  $I_F - V_F$  $I_Z - V_Z$  $I_R - V_R$  $R_Z - I_Z$  $C_t - V_R$ 