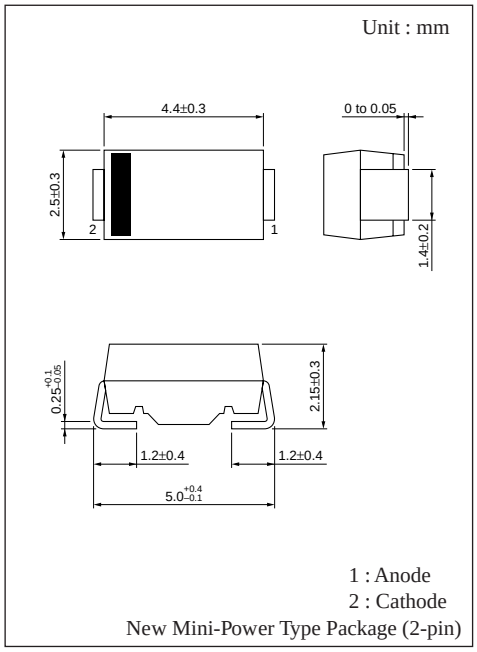
MA2Z000 Series

Silicon planer type

For stabilization of power supply



■ Features

- Large power dissipation : P_D=1.0W
- High Zener voltage V_Z : 200 to 330V
- Automatic mounting possible

■ Absolute Maximum Ratings (Ta= 25˚C)

Parameter	Symbol	Rating	Unit
Repetitive peak forward current	I_{FRM}	500	mA
Total power dissipation	P_{tot} * 1	1.0	W
Non-repetitive reverse surge power dissipation	P_{ZSM} * 2	100	W
Junction temperature	T_j	150	˚C
Storage temperature	T_{stg}	– 40 to +150	˚C

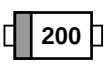
* 1 P_{tot}=1.0W achieved with a printed-circuit board (alumina)
* 2 t=100µ s, T_j=150˚C

■ Common Electrical Characteristics (Ta= 25˚C)*1

Parameter	Symbol	Condition	min	typ	max	Unit
Forward voltage	V_F	I_F= 200mA			1.2	V
Zener voltage	V_Z * 2	I_Z ..... Specified value	Refer to the electrical characteristics list of P447			V
Operating resistance	R_Z	I_Z ..... Specified value				Ω
Reverse current	I_R	V_R..... Specified value				µA
Temperature coefficient of zener voltage	S_Z * 3	I_Z ..... Specified value				mV/˚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 : Guaranteeed at 20ms after power application
* 3 : T_j= 25 to 150˚C

■ Marking (Example)



Abbreviated product name to be stamped
Example) MA2Z200

■ Electrical Characteristics (Ta= 25˚C)

Part Number	Zener voltage				Reverse current		Operating resistance		Temperature coefficient of zener voltage		Marking
	V_Z				I_R		R_Z		S_Z		
	min (V)	nom (V)	max (V)	I_Z (mA)	max (μA)	V_R (V)	max (Ω)	I_Z (mA)	typ (mV/˚C)	I_Z (mA)	
MA2Z200	180	200	220	1.5	10	160	600	1.5	170	1.5	200
MA2Z220	198	220	242	0.5	10	176	10,000	0.5	200	0.5	220
MA2Z240	216	240	264	0.5	10	192	10,000	0.5	215	0.5	240
MA2Z270	243	270	297	0.5	10	216	5,000	0.5	243	0.5	270
MA2Z300	270	300	330	0.5	10	240	5,000	0.5	270	0.5	300
MA2Z330	297	330	363	0.5	10	264	5,000	0.5	296	0.5	330

$I_Z - V_Z$