

MA5Z000 Series

Silicon planer type

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

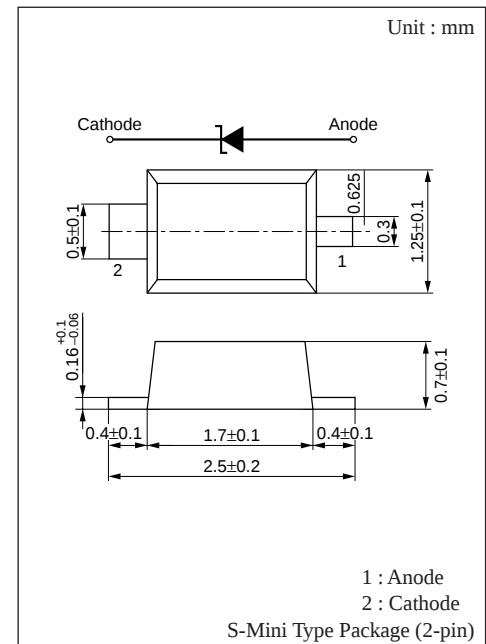
■ Features

- S-mini type package
- High voltage withstand zener diode

■ Absolute Maximum Ratings (Ta= 25°C)

Parameter	Symbol	Rating	Unit
Instantious forward current	I_{FRM}	200	mA
Total power dissipation	P_{tot}^*	150	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	- 55 to +150	°C

* With a printed-circuit board



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

Parameter	Symbol	Condition	min	typ	max	Unit
Forward voltage	V_F	$I_F = 10\text{mA}$			1.2	V
Zener voltage	V_Z^{*2}	I_Z Specified value	Refer to the electrical characteristics list of P469			V
Reverse current	I_R	V_R Specified value				μA
Temperature coefficient of zener voltage	S_Z	I_Z Specified value				mW/°C

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

■ Electrical Characteristics (Ta= 25°C)

Part Number	Zener voltage				Reverse current		Temperature coefficient of zener voltage		Marking
	V _Z				I _R		S _Z		
	min (V)	nom (V)	max (V)	I _Z (mA)	max (μA)	V _R (V)	typ (V/°C)	I _Z (mA)	
MA5Z190	180	190	200	0.1	1	160	0.22	0.1	AZ
MA5Z200	190	200	210	0.1	1	160	0.31	0.1	AA or AB
MA5Z200-L									AA
MA5Z200-H									AB
MA5Z220	210	220	240	0.1	1	176	0.31	0.1	AC or AD
MA5Z220-L			230						AC
MA5Z220-H	220	230	240						AD
MA5Z240	230	240	270	0.1	1	192	0.31	0.1	AE or AF or AH
MA5Z240-L			250						AE
MA5Z240-M	240	250	260						AF
MA5Z240-H	250	260	270						AH
MA5Z270	260	270	300	0.1	1	216	0.31	0.1	AI or AK or AL
MA5Z270-L			280						AI
MA5Z270-M	270	280	290						AK
MA5Z270-H	280	290	300						AL
MA5Z300	290	300	330	0.1	1	240	0.31	0.1	AM or AN or AO
MA5Z300-L			310						AM
MA5Z300-M	300	310	320						AN
MA5Z300-H	310	320	330						AO
MA5Z330	320	330	360	0.1	1	264	0.31	0.1	AP or AR or AS
MA5Z330-L			340						AP
MA5Z330-M	330	340	350						AR
MA5Z330-H	340	350	360						AS

