

MAZU000 Series (MA5Z000 Series)

Silicon planar type

For constant voltage, constant-current, waveform clipper and surge absorption circuit

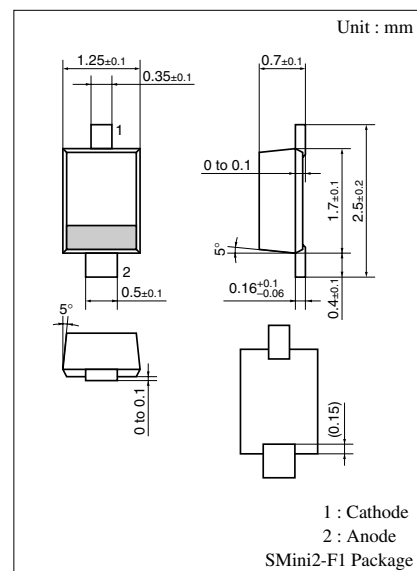
■ Features

- S-mini type 2-pin package
- High breakdown voltage zener diode

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

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

Note) * : With a printed-circuit board



■ Common Electrical Characteristics $T_a = 25^\circ\text{C}^{*1}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 10 \text{ mA}$			1.2	V
Zener voltage ^{*2}	V_Z	I_Z Specified value	Refer to the list of the electrical characteristics within part numbers			V
Reverse current	I_R	V_R Specified value				μA
Temperature coefficient of zener voltage	S_Z	I_Z Specified value				$\text{mW}/^\circ\text{C}$

Note) 1. Test method according to the JIS C7031 testing

2. Rated input/output frequency: 5 MHz

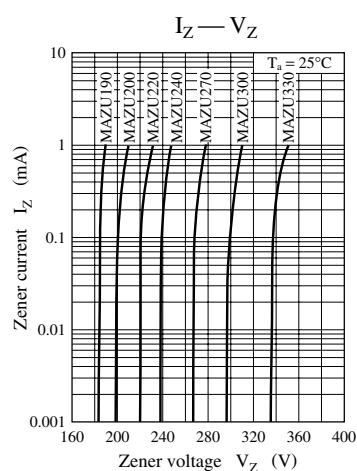
2. *1 : The V_Z value is for the temperature of 25°C . In other cases, carry out the temperature compensation.

*2 : Guaranteed at 20 ms after power application.

Note) The part number in the parenthesis shows conventional part number.

■ Electrical characteristics within part numbers $T_a = 25^\circ\text{C}$

Part Number	Zener voltage				Reverse current		Temperature coefficient of zener voltage		Marking Symbol
	V _Z (V)				I _R		S _Z		
	Min (V)	Nom (V)	Max (V)	I _Z (mA)	Max (μA)	V _R (V)	Typ (V/°C)	I _Z (mA)	
MAZU190	180	190	200	0.1	1	160	0.22	0.1	AZ
MAZU200	190	200	210	0.1	1	160	0.31	0.1	AA or AB
MAZU200-L									AA
MAZU200-H									AB
MAZU220	210	220	240	0.1	1	176	0.31	0.1	AC or AD
MAZU220-L			230						AC
MAZU220-H			240						AD
MAZU240	230	240	270	0.1	1	192	0.31	0.1	AE or AF or AH
MAZU240-L			250						AE
MAZU240-M			260						AF
MAZU240-H	250	260	270	0.1	1	216	0.31	0.1	AH
MAZU270	260	270	300						AI or AK or AL
MAZU270-L			280						AI
MAZU270-M			290						AK
MAZU270-H	280	290	300	0.1	1	240	0.31	0.1	AL
MAZU300	290	300	330						AMor AN or AO
MAZU300-L			310						AM
MAZU300-M			320						AN
MAZU300-H	310	320	330	0.1	1	264	0.31	0.1	AO
MAZU330	320	330	360						APor AR or AS
MAZU330-L			340						AP
MAZU330-M			350						AR
MAZU330-H	340	350	360						AS



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