

MAZAxxx Series

Silicon planar type

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

■ Features

- Low noise type

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

Parameter	Symbol	Rating	Unit
Repetitive peak forward current	I_{FRM}	200	mA
Total power dissipation *	P_T	100	mW
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

Note) *: $P_T = 100$ mW achieved with a printed circuit board.

■ Package

- Code
ML2-N1
- Pin Name
1: Anode
2: Cathode

■ Marking Symbol:

Refer to the list of the electrical characteristics within part numbers

■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 10$ mA		0.9	1.0	V
Zener voltage *1	V_Z	I_Z Specified value				V
Zener rise operating resistance	R_{ZK}	I_Z Specified value	Refer to the list of the electrical characteristics within part numbers			Ω
Zener operating resistance	R_Z	I_Z Specified value				Ω
Reverse current	I_R	V_R Specified value				μA
Temperature coefficient of zener voltage *2	S_Z	I_Z Specified value				mV/ $^\circ\text{C}$

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

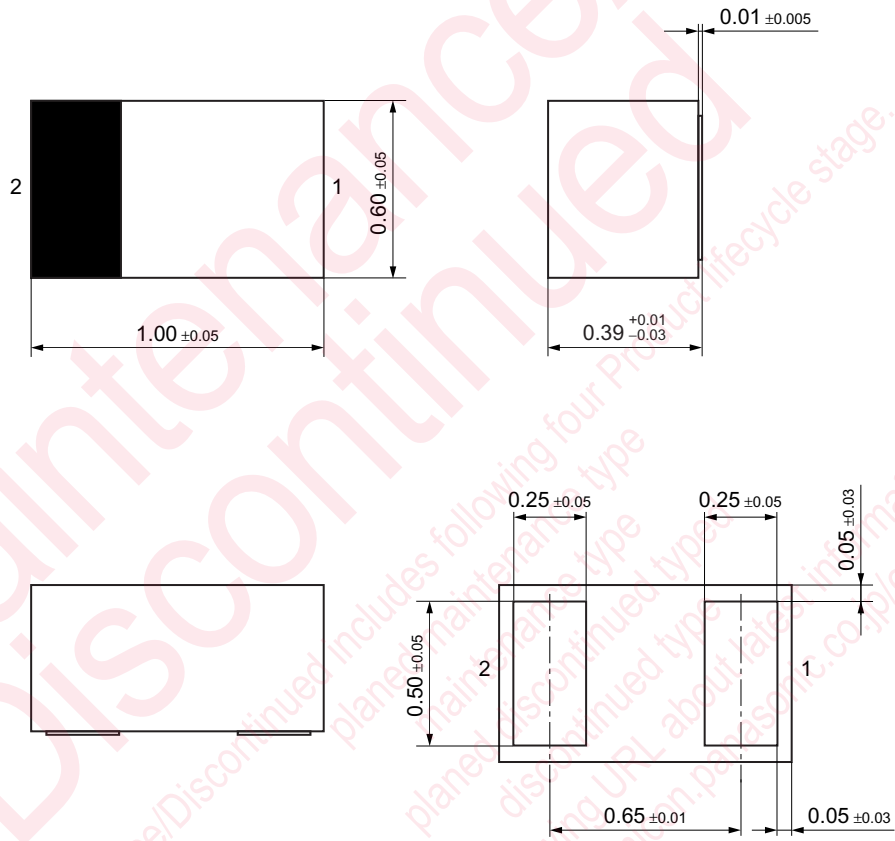
- Absolute frequency of input and output is 5 MHz
- The temperature must be controlled 25°C for V_Z measurement.
 V_Z value measured at other temperature must be adjusted to $V_Z (25^\circ\text{C})$
- *1: V_Z guaranteed 20 ms after current flow.
- *2: $T_j = 25^\circ\text{C}$ to 125°C

■ Electrical Characteristics within Part Numbers $T_a = 25^{\circ}\text{C} \pm 3^{\circ}\text{C}$

Part number	Zener voltage V_Z (V)				Reverse current I_R (μA)		Zener rise operating resistance R_{ZK} (Ω)		Zener operating resistance R_Z (Ω)		Temperature coefficient of zener voltage S_Z (mV/ $^{\circ}\text{C}$)		Marking symbol
	Min	Typ	Max	I_Z (mA)	Max	V_R (V)	Max	I_Z (mA)	Max	I_Z (mA)	typ	I_Z (mA)	
MAZA024	2.28	2.40	2.60	5	120	1.0	—	—	100	5	-1.6	5	1F
MAZA027	2.50	2.70	2.90	5	120	1.0	—	—	110	5	-2.0	5	2F
MAZA030	2.80	3.00	3.20	5	50	1.0	—	—	120	5	-2.1	5	3F
MAZA033	3.10	3.30	3.50	5	20	1.0	—	—	130	5	-2.4	5	4F
MAZA036	3.40	3.60	3.80	5	10	1.0	—	—	130	5	-2.4	5	5F
MAZA039	3.70	3.90	4.10	5	10	1.0	—	—	130	5	-2.5	5	6F
MAZA043	4.00	4.30	4.60	5	10	1.0	—	—	130	5	-2.5	5	AF
MAZA047	4.40	4.70	5.00	5	2.0	1.0	800	1.0	80	5	-1.4	5	HF
MAZA062	5.80	6.20	6.60	5	0.2	4.0	100	0.5	30	5	2.3	5	DF
MAZA075	7.00	7.50	7.90	5	0.1	5.0	60	0.5	20	5	4.0	5	TF
MAZA091	8.50	9.10	9.60	5	0.1	6.0	60	0.5	20	5	5.5	5	FF
MAZA100	9.40	10.00	10.60	5	0.05	7.0	60	0.5	30	5	6.4	5	GF
MAZA110	10.40	11.00	11.60	5	0.05	8.0	60	0.5	30	5	7.4	5	JF
MAZA120	11.40	12.00	12.70	5	0.05	9.0	80	0.5	30	5	8.4	5	KF
MAZA130	12.40	13.00	14.10	5	0.05	10.0	80	0.5	35	5	9.4	5	LF
MAZA150	13.90	15.00	15.60	5	0.05	11.0	80	0.5	40	5	11.4	5	MF
MAZA160	15.30	16.00	17.10	5	0.05	12.0	80	0.5	50	5	12.4	5	NF
MAZA180	16.90	18.00	19.10	5	0.05	13.0	80	0.5	60	5	14.4	5	PF
MAZA200	18.80	20.00	21.20	5	0.05	15.0	100	0.5	80	5	16.4	5	RF
MAZA220	20.80	22.00	23.30	5	0.05	17.0	100	0.5	80	5	18.4	5	SF
MAZA240	22.80	24.00	25.60	5	0.05	19.0	120	0.5	100	5	20.4	5	UF
MAZA270	25.10	27.00	28.90	2	0.05	21.0	120	0.5	120	2	23.4	2	VF
MAZA300	28.00	30.00	32.00	2	0.05	23.0	160	0.5	160	2	26.6	2	XF
MAZA330	31.00	33.00	35.00	2	0.05	25.0	200	0.5	200	2	29.7	2	YF
MAZA360	34.00	36.00	38.00	2	0.05	27.0	250	0.5	250	2	33.0	2	ZF
MAZA390	37.00	39.00	41.00	2	0.05	30.0	300	0.5	300	2	35.6	2	7F

ML2-N1

Unit: mm



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