

# MAZG000 Series

Silicon planer type

Surge absorption circuit

## ■ Features

- DO-34 package
- No rank classification ( $V_Z = 3.3$  to  $12V$ )

## ■ Absolute Maximum Ratings ( $T_a = 25^\circ C$ )

Parameter	Symbol	Rating	Unit
Average forward current	$I_{F(AV)}$	250	mA
Instantaneous forward current	$I_{FRM}$	250	mA
Total power dissipation	$P_{tot}^*$	370	mW
Junction temperature	$T_j$	200	$^\circ C$
Storage temperature	$T_{stg}$	- 65 to + 200	$^\circ C$

\* With a printed-circuit board

## ■ Common Electrical Characteristics ( $T_a = 25^\circ C$ )\*<sup>1</sup>

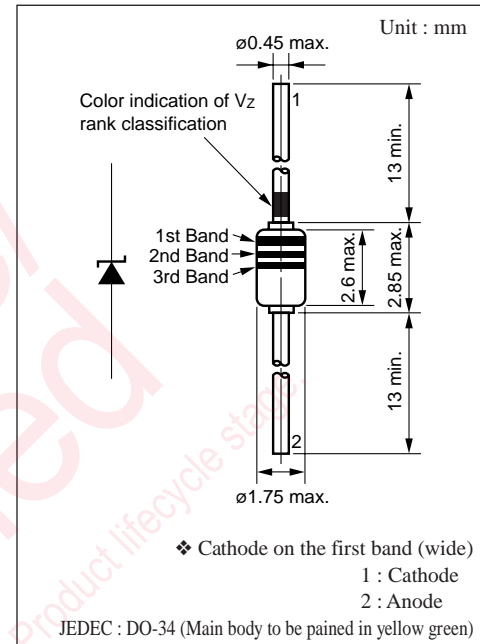
Parameter	Symbol	Condition	min	typ	max	Unit
Forward voltage	$V_F$	$I_F = 10mA$		0.8	0.9	V
Zener voltage	$V_Z^{*2}$	$I_Z$ ..... Specified value				V
Operating resistance	$R_Z$	$I_Z$ ..... Specified value	Refer to the electrical characteristics			$\Omega$
Reverse current	$I_R$	$V_R$ ..... Specified value	list of P485			$\mu A$
Terminal capacitance	$C_t$	$V_R$ ..... Specified value				pF

Note 1. Test method : Depend on JIS C7031 testing

2. Rated input/output frequency : 40MHz

3. \*<sup>1</sup> : The  $V_Z$  value is for the temperature of  $25^\circ C$ . In other cases, carry out the temperature compensation.

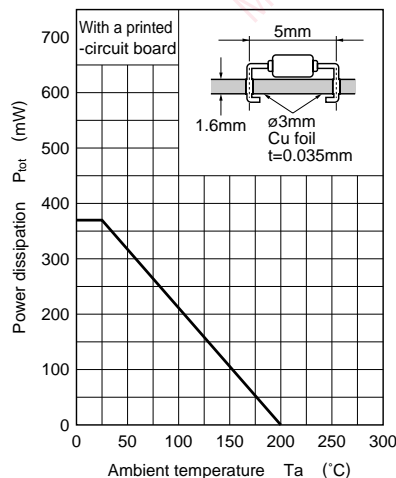
\*<sup>2</sup> : Guaranteed at 20ms after power application



■ Electrical Characteristics (Ta= 25°C)

Part Number	Zener voltage				Reverse current		Operating resistance		Terminal capacitance	Marking (Color indication)		
	V <sub>Z</sub>				I <sub>R</sub>		R <sub>Z</sub>		C <sub>t</sub> (pF) (V <sub>R</sub> = 0V) f=1MHz typ	1st.	2nd.	3rd.
	min (V)	nom (V)	max (V)	I <sub>Z</sub> (mA)	max (μA)	V <sub>R</sub> (V)	max (Ω)	I <sub>Z</sub> (mA)				
MAZG033	3.10	3.30	3.50	5	20	1.0	130	5	325	Orange	Orange	Orange
MAZG036	3.40	3.60	3.80	5	10	1.0	130	5	300	Orange	Blue	Blue
MAZG039	3.70	3.90	4.10	5	10	1.0	130	5	300	Orange	White	White
MAZG043	4.00	4.30	4.60	5	10	1.0	130	5	275	Yellow	Orange	Orange
MAZG047	4.40	4.70	5.00	5	3.0	1.0	80	5	130	Yellow	Purple	Purple
MAZG051	4.80	5.10	5.40	5	2.0	2.0	60	5	110	Green	Brown	Brown
MAZG056	5.30	5.60	6.00	5	1.0	2.0	40	5	95	Green	Blue	Blue
MAZG062	5.80	6.20	6.60	5	3.0	4.0	20	5	90	Blue	Red	Red
MAZG068	6.40	6.80	7.20	5	2.0	4.0	15	5	85	Blue	Gray	Gray
MAZG075	7.00	7.50	7.90	5	1.0	5.0	15	5	80	Purple	Green	Green
MAZG082	7.70	8.20	8.70	5	0.5	5.0	15	5	75	Gray	Red	Red
MAZG091	8.50	9.10	9.60	5	0.2	6.0	20	5	70	White	Brown	Brown
MAZG100	9.40	10.00	10.60	5	0.2	7.0	30	5	70	Brown	Black	—
MAZG110	10.40	11.00	11.60	5	0.1	7.0	30	5	65	Brown	Brown	—
MAZG120	11.40	12.00	12.70	5	0.1	8.0	30	5	65	Brown	Red	—

P<sub>tot</sub> - Ta



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