

# MAZQxxx Series

## Silicon planar type

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

### ■ Features

- Optimum for high-density mounting
- 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 *	$P_T$	120	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

Note) \*:  $P_T = 120$  mW achieved with a printed circuit board.

### ■ Package

- Code  
USSMini2-F1
- 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 current	$V_F$	$I_F = 10$ mA		0.9	1.0	V
Zener voltage *	$V_Z$	$I_Z$ Specified value	Refer to the list of the electrical characteristics within part numbers			V
Zene operating resistance	$R_Z$	$I_Z$ Specified value				$\Omega$
Reverse current	$I_R$	$V_R$ Specified value				$\mu\text{A}$

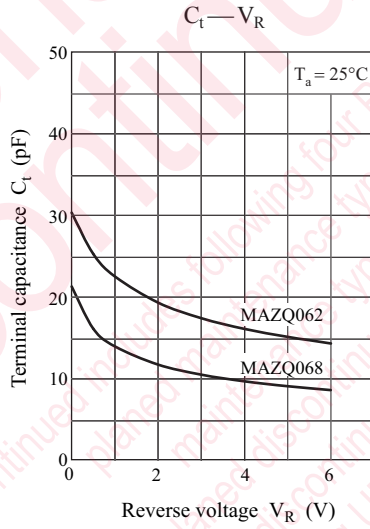
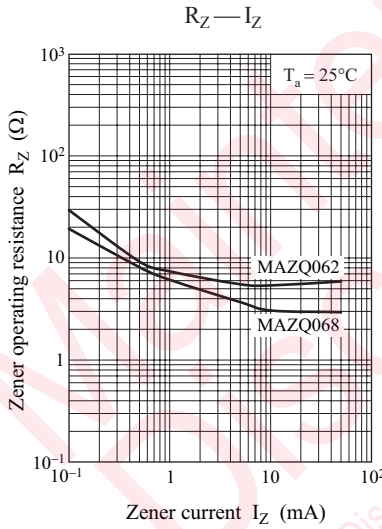
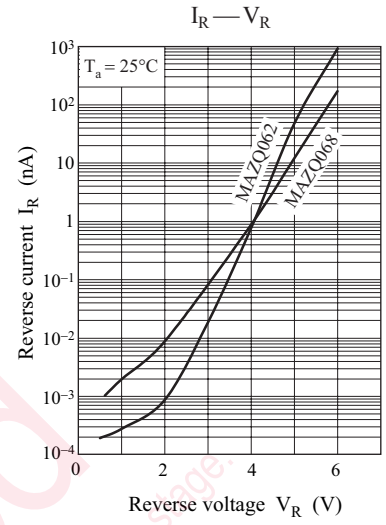
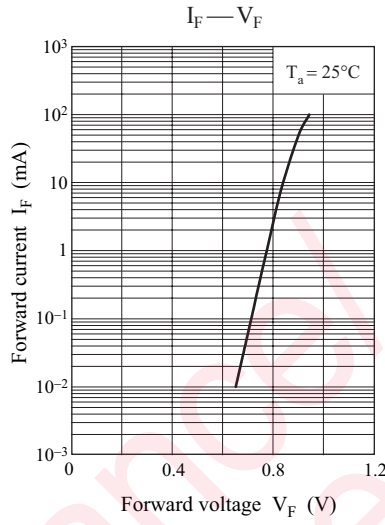
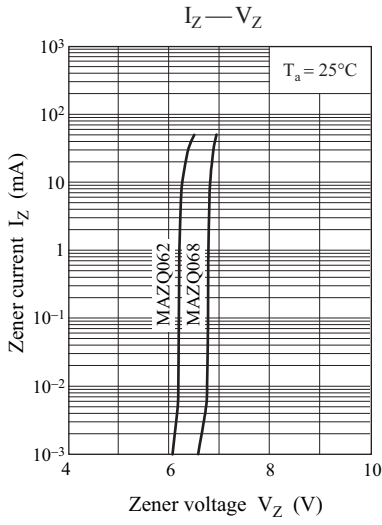
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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

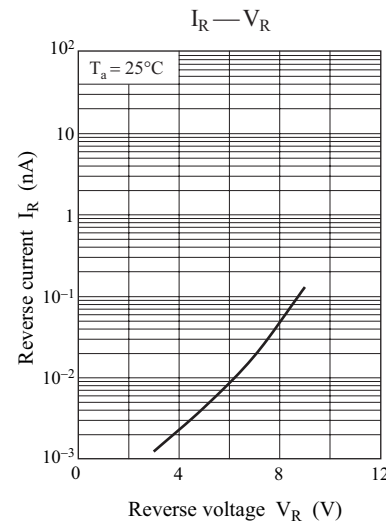
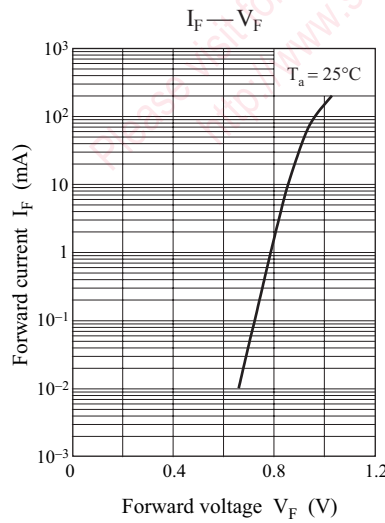
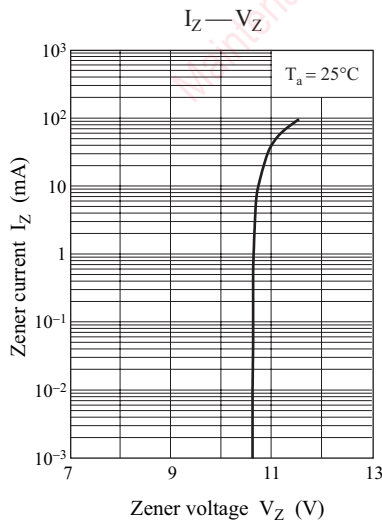
### ■ Electrical Characteristics within Part Numbers $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

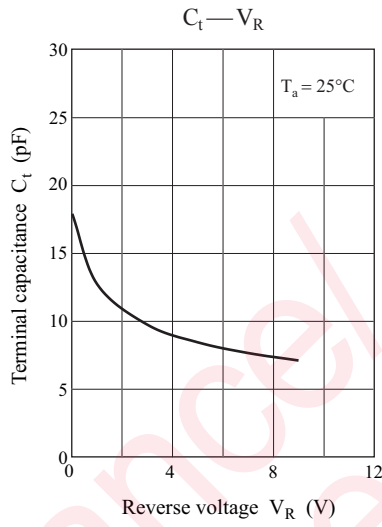
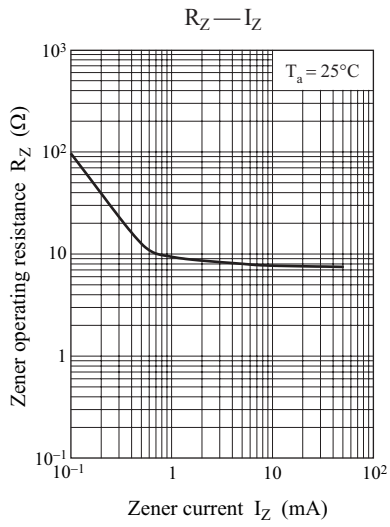
Part number	Zener voltage $V_Z$ (V)				Zener operating resistance $R_Z$ ( $\Omega$ )		Reverse current $I_R$ ( $\mu\text{A}$ )		Marking symbol
	Min	Typ	Max	$I_Z$ (mA)	Max	$I_Z$ (mA)	Max	$V_R$ (V)	
MAZQ062	5.8	6.2	6.6	5	30	5	0.2	4.0	E
MAZQ068	6.4	6.8	7.2	5	20	5	0.1	4.0	F
MAZQ100	9.40	10.00	10.60	5	30	5	0.05	7	L
MAZQ200	18.80	20.00	21.20	5	80	5	0.05	15.0	V
MAZQ300	28.00	30.00	32.00	2	160	2	0.05	23.0	Y

Characteristics charts of MAZQ062, MAZQ068

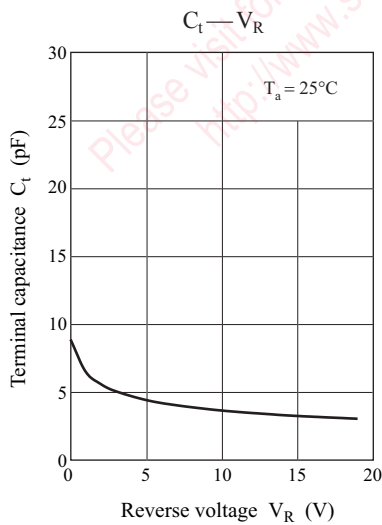
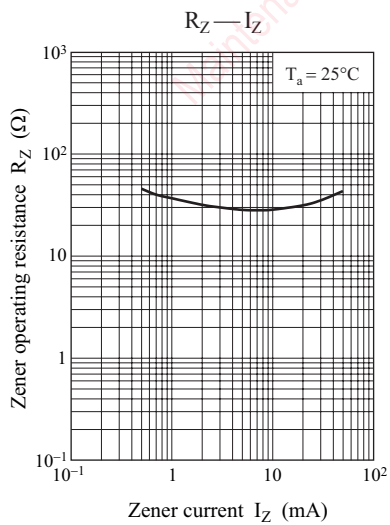
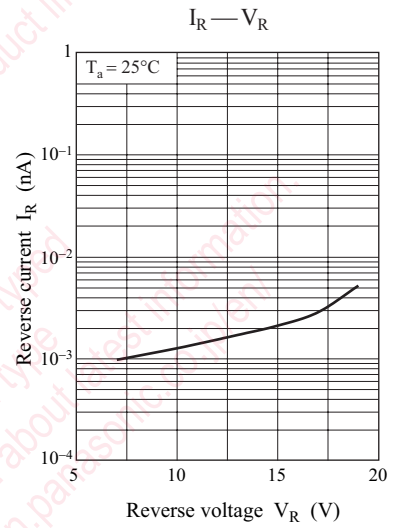
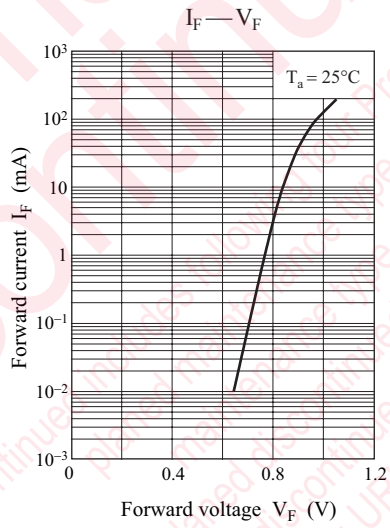
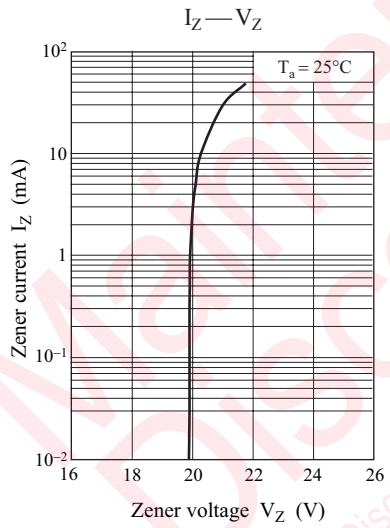


Characteristics charts of MAZQ100

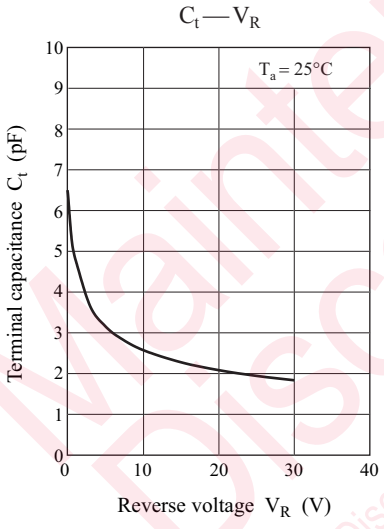
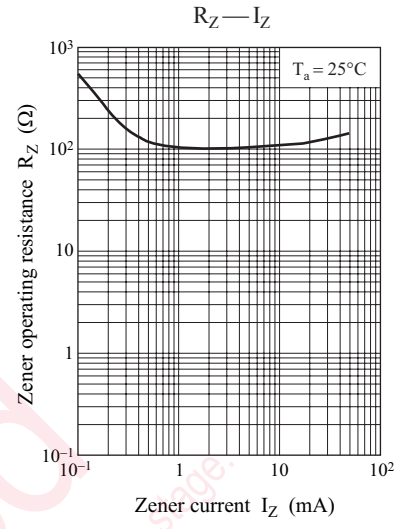
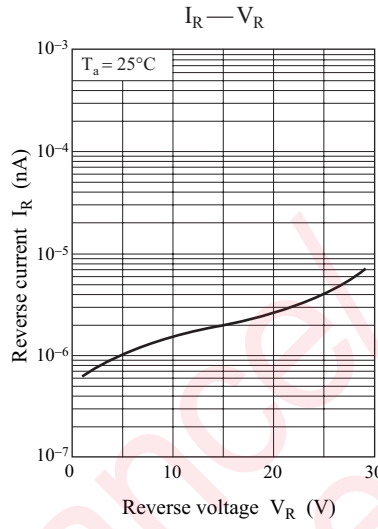
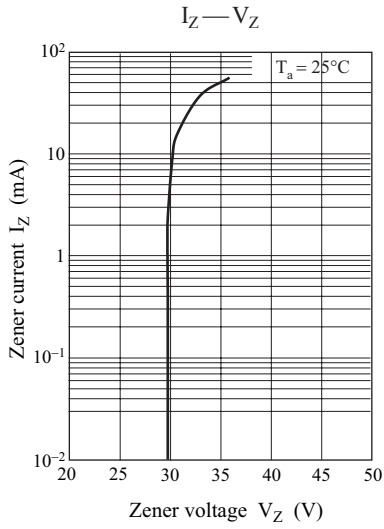




Characteristics charts of MAZQ200



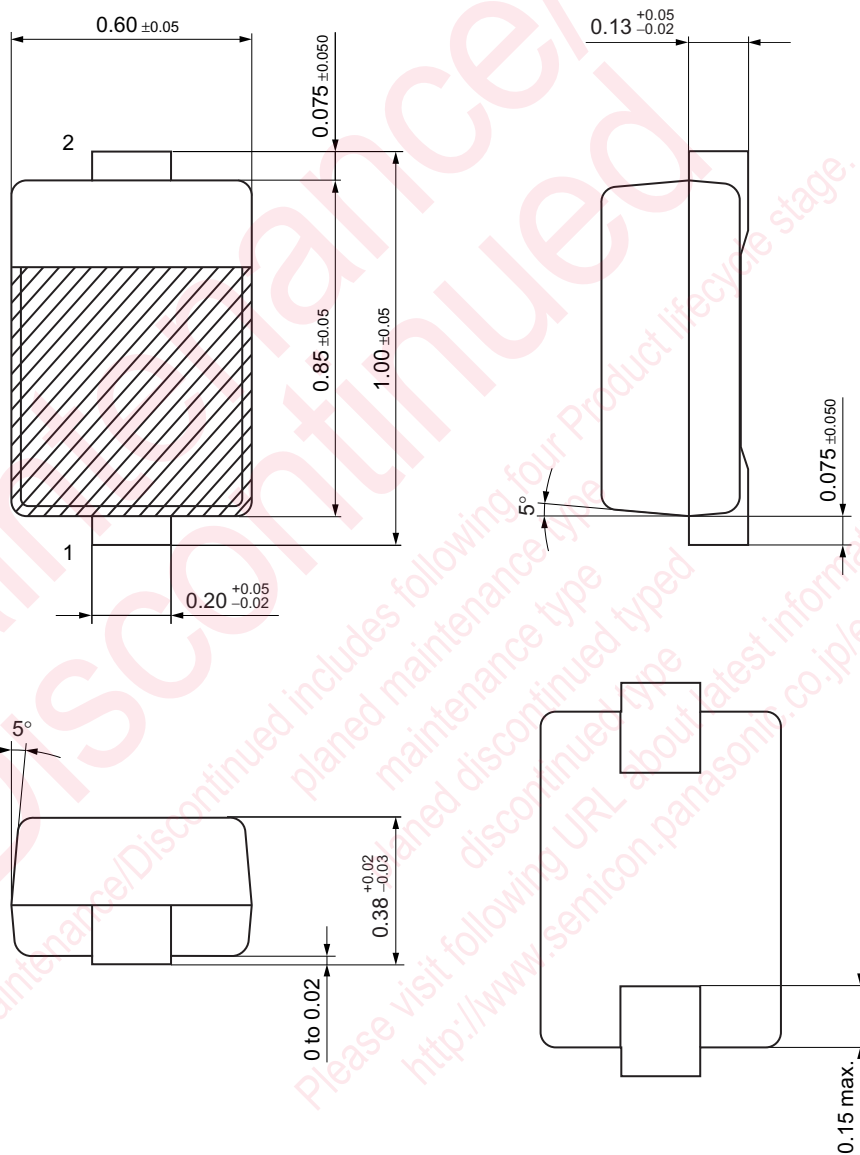
Characteristics charts of MAZQ300



Maintenance/Discontinued includes following four Product lifecycle stage  
 planned maintenance type  
 maintenance type  
 planned discontinued type  
 discontinued type  
 Please visit following URL about latest information.  
<http://www.semicon.panasonic.co.jp/en/>

USSMini2-F1

Unit: mm



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