Zener Diodes Panasonic

# MALS068X

## Silicon planar type

For constant voltage and surge absorption circuits

#### ■ Features

- Bi-directional and high electrostatic discharge ESD
- Small terminal capacitance C<sub>t</sub>

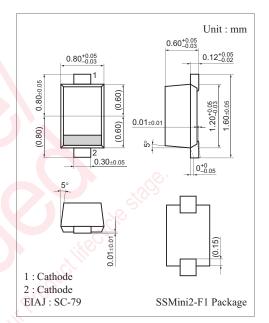
### ■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit	
Repetitive peak forward current	$I_{FRM}$	200	mA	
Total power dissipation *1	$P_{T}$	150	mW	
Junction temperature	$T_{j}$	150	°C	
Storage temperature	T <sub>stg</sub>	-55 to +150	°C	
Electrostatic discharge *2	ESD	±15	kV	

Note)  $*1: P_T = 150 \text{ mW}$  achieved with a printed circuit board.

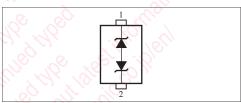
\*2: Test method: IEC61000-4-2

 $(C = 150 \text{ pF}, R = 330 \Omega, \text{Contact discharge: } 10 \text{ times})$ 



#### Marking Symbol: RX

#### Internal Connection



### ■ Electrical Characteristics $T_a = 25$ °C±3°C

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Zener voltage *	$\sim$ $V_{\rm Z}$	$I_Z = 5 \text{ mA}$	6.5	7.0	7.5	V
Zener operating resistance	$R_Z$	$I_Z = 5 \text{ mA}$			20	Ω
Reverse current	$I_R$	$V_R = 4.0 \text{ V}$			50	nA
Terminal capacitance	$C_{t}$	$V_R = 0 \text{ V, } f = 1 \text{ MHz}$		15		pF

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

- 2. The temperature must be controlled 25°C for  $V_Z$  mesurement.  $V_Z$  value measured at other temperature must be adjusted to  $V_Z$  (25°C)
- 3. \*:  $V_Z$  guaranted 20 ms after current flow.

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