



# RMP6V1S

## Transient Voltage Suppressor

### Features

- ANODE-Common Structure(Dual TVS)
- Suitable to small packages (SOT-23) Chip Size=0.53mmsq
- High ESD protection level  
IEC61000-4-2(ESD) +/-16kV(Air) +/-9kV(Contact)

### Applications

- Computers and Peripherals
- Communication systems
- Audio and video equipment
- Parallel ports

| Item       | Characteristics |
|------------|-----------------|
| Wafer size | 5inch           |
| Chip size  | 530*530um       |

### Maximum Ratings (Ta=25degC)

| Symbol           | Parameter   | Value      | Units    |
|------------------|---|------------|----------|
| P <sub>pk</sub>  | Peak Power Dissipation(tp=8/20us) (*1)  | 300        | W        |
| I <sub>pp</sub>  | Maximum Peak Pulse Current(tp=8/20us) (*1)  | 18.5       | A        |
| T <sub>stg</sub> | Storage Temperature Range   | -55 to+150 | Deg C    |
| T <sub>j</sub>   | Maximum Junction Temperature (*1)   | 150        | Deg C    |
| V <sub>pp</sub>  | Electrostatic Discharge<br>IEC61000-4-2 Air Discharge (*1)<br>IEC61000-4-2 Contact Discharge (*1) | ±16<br>±9  | kV<br>kV |

(\*1) Rating value for reference on a SOT-23 package configuration (front: Au wire 35um, back: Au eutectic), mounted on PCB of 1.5cm by 2.5cm.

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## Electrical Characteristics (Ta=25degC)

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| Parameter            | Symbol          | Min | Typ. | Max  | Unit | Condition                    |
|----------------------|-----------------|-----|------|------|------|------------------------------|
| Breakdown Voltage    | V <sub>BR</sub> | 6.1 | 6.65 | 7.2  | V    | I <sub>R</sub> =1.0mA        |
| Leakage Current      | I <sub>RM</sub> | -   | -    | 2.5  | uA   | V <sub>RM</sub> =5.25V       |
| Capacitance          | C               | -   | 140  | -    | pF   | 0V 1MHz                      |
| Forward Voltage Drop | V <sub>F</sub>  | -   | -    | 1.25 | V    | I <sub>F</sub> =200mA        |
| Clamping Voltage     | V <sub>c</sub>  | -   | -    | 16.2 | V    | I <sub>pp</sub> =18.5A<br>*1 |

\*1 Package=SOT-23(front: Au wire 35um, back: Au eutectic)