

**PHENITEC**  
**SEMICONDUCTOR**

**RNP5V7**

**Transient Voltage Suppressor**

**Features**

- Single Structure
- Suitable to small packages Chip Size=0.225mmsq
- High ESD protection level  
IEC61000-4-2(ESD) +/-15kV(Air) +/-8kV(Contact)

**Applications**

- LED protections

Item	Characteristics
Wafer size	5inch
Chip Size	225*225um

**Maximum Ratings (Ta=25degC)**

Symbol	Parameter	Value	Units
P <sub>pk</sub>	Peak Power Dissipation(tp=8/20us) (*1)	83	W
I <sub>pp</sub>	Maximum Peak Pulse Current(tp=8/20us) (*1)	5.5	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		
	IEC61000-4-2 Air Discharge (*1)	±15	kV
	IEC61000-4-2 Contact Discharge (*1)	±8	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.

**Electrical Characteristics (Ta=25degC)**

Parameter	Symbol	Min	Typ.	Max	Unit	Condition
Breakdown Voltage	V <sub>BR</sub>	5.7	6.2	6.7	V	I <sub>R</sub> =5.0mA
Leakage Current	I <sub>RM</sub>	-	-	0.1	uA	V <sub>RWM</sub> =4.0V
Capacitance	C	-	35	-	pF	V=0V 1MHz
Forward Voltage Drop	V <sub>F</sub>	-	-	1.2	V	I <sub>F</sub> =20mA
Clamping Voltage	V <sub>C</sub>	-	-	15	V	I <sub>pp</sub> =5.5A (tp=8/20us) *1

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

## UNDER DEVELOPMENT

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### Ordering Information

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Type	Chip Thickness	Back Metalization	Die Bonding For
RNP5V7V	100um	Au	Eutectic/Ag Paste