

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 _{pk}	Peak Power Dissipation(tp=8/20us) (*1)	83	W
I _{pp}	Maximum Peak Pulse Current(tp=8/20us) (*1)	5.5	A
T _{stg}	Storage Temperature Range	-55 to+150	Deg C
T _j	Maximum Junction Temperature (*1)	150	Deg C
V _{pp}	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 _{BR}	5.7	6.2	6.7	V	I _R =5.0mA
Leakage Current	I _{RM}	-	-	0.1	uA	V _{RWM} =4.0V
Capacitance	C	-	35	-	pF	V=0V 1MHz
Forward Voltage Drop	V _F	-	-	1.2	V	I _F =20mA
Clamping Voltage	V _c	-	-	15	V	I _{pp} =5.5A (tp=8/20us) *1

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

Ordering Information

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