

PHENITEC

SEMICONDUCTOR

RJPxxxx

Transient Voltage Suppressor

Features

- Suitable to small packages (SOT-553) Chip Size=0.36mmsq
- High ESD protection level
IEC61000-4-2(ESD) +/-16kV(air) +/-9kV(Contact)
- Quad Array TVS

Applications

- Instrumentation equipment
- Serial and parallel ports
- Microprocessor based equipment
- Notebooks, Desktops, Servers
- Cellular and portable equipment

Item	Characteristics
Wafer size	5inch
Chip size	360*360um

Maximum Ratings (Ta=25degC)

Symbol	Parameter	Value	Units
Ppk	Peak Power Dissipation @=8/20us (*1)		
	RJP5V3	52	W
	RJP6V4	43	W
	RJP12V	41	W
Pd	Power Dissipation(*1)	300	mW
Tstg	Storage Temperature Range	-55 to+150	Deg C
Tj	Maximum Junction Temperature (*1)	150	Deg C
Vpp	Electrostatic Discharge		
	IEC61000-4-2 Air Discharge (*1)	± 16	kV
	IEC61000-4-2 Contact Discharge (*1)	± 9	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)

Ratings at 25degC ambient temperature unless otherwise specified.

Device	VRWM (V) Max	IR (uA) @ VRWM Max	VBR (V) @IT			IT (mA)	Vc (V) @IppMax *1 Max	Ipp (A) *1 Max	C (pF)			
			Min	Ctr	Max				@1MHz		@3V	
									Typ	Max	Typ	Max
RJP5V3T	3.0	1.0	5.3	5.6	5.9	1.0	14.4	3.6	14.5	-	8.0	-
RJP6V4T	4.3	1.0	6.47	6.80	7.14	1.0	13.8	3.1	12.5	15	6.7	9.5
RJP12VR	9.0	0.5	11.4	12.0	12.7	5.0	22.5	1.8	6.5	10	3.5	5.0

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

Ordering Information

Type	Chip Thickness	Top Metalization	Chip Quantity
RJP5V3T	150um	AL-Si(For Wire)	83,942pcs/wafer
RJP6V4T	150um	AL-Si(For Wire)	83,942pcs/wafer
RJP12VR	100um	AL(For Wire)	84,926pcs/wafer