

PHENITEC

SEMICONDUCTOR

RGPxxxS

Transient Voltage Suppressor

Features

- Suitable to small packages (SOT-23) Chip Size=0.44mmsq
- 350W Peak Power Dissipation(tp=8/20us)
- High ESD protection level IEC61000-4-2(ESD) +/-25kV(Air)
+/-10kV(Contact)

Applications

- Cellular phone handsets and accessories
- Microprocessor based equipment
- Personal Digital Assistants(PDA's)
- Notebooks, Desktops, and Servers
- Portable instrumentation
- Pagers peripherals

Item	Characteristics
Wafer size	5inch
Chip size	440*440um

Maximum Ratings (Ta=25degC)

Symbol	Parameter	Value	Units
P _{pk}	Peak Power Dissipation(tp=8/20us) (*1)	350	W
I _{pp}	Maxmum Peak Pulse Current(tp=8/20us) (*1) RGP6V0 RGP12V	24 12	A A
T _{stg}	Storage Temperature Range(*1)	-55 to+150	Deg C
T _j	Maximum junction temperature(*1)	-55 to+150	Deg C
V _{pp}	Electrostatic discharge IEC61000-4-2 air discharge (*1) IEC61000-4-2 contact discharge (*1)	±25 ±10	kV 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)

Device	VRWM (V)	IR (uA)	VBR (V)			IT (mA)	VF (V) @10mA	C (pF) @0V @1MHz Typ	Vc (V) @Ipp (*2) Max
	Max	@VRWM Max	Min	@IT					
				Max	Ctr				
RGP6V0S	5.0	10.0	6.20	6.75	7.30	1.0	0.9	235	14.5
RGP12VS (*1)	12.0	1.0	13.3	-	-	1.0	0.9	100	25

(*1)UNDER DEVELOPMENT

(*2)Package=SOT-23(front: Au wire,back: Au eutectic) @tp=8/20us