

Protection in Portable Electronics Applications.

### FEATURES

- 200 Watts peak pulse power (tp=8/20 μs)
- Transient protection for high-speed data lines to IEC61000-4-4(EFT) 40A(tp=5/50ns)
- IEC61000-4-5(Lightning) 24A(tp=8/20 μs)
- Protects four I/O lines.
- Low clamping voltage.
- Low operating and leakage current.
- Small package for use in portable electronics.
- Suffix U : Qualified to AEC-Q101.  
ex) PG05GBUSV-RTK/HU

### APPLICATIONS

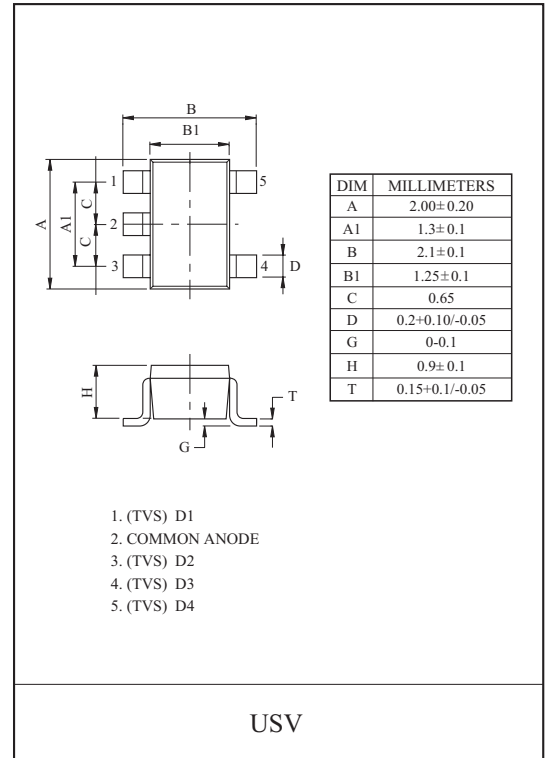
- Cellular Phone Handsets and Accessories.
- Notebooks, desktops PC, & servers.
- Portable Instrumentation.
- Set-Top Box, DVD Player.
- Digital Camera.

### MAXIMUM RATING (Ta=25 °C)

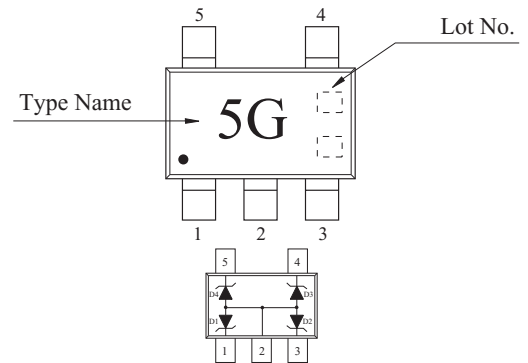
CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Pulse Power (tp=8/20 μs)	P <sub>PK</sub>	200	W
Peak Pulse Current (tp=8/20 μs)	I <sub>PP</sub>	12	A
Operating Temperature	T <sub>j</sub>	150	
Storage Temperature	T <sub>stg</sub>	-55 150	

### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Reverse Stand-Off Voltage	V <sub>RWM</sub>	-	-	-	5	V	
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>r</sub> =1mA	6	-	-	V	
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> =5V	-	-	10	μA	
Clamping Voltage	V <sub>C</sub>	I <sub>pp</sub> =1A, tp=8/20 μs	-	-	9.5	V	
		I <sub>pp</sub> =5A, tp=8/20 μs	-	10	12		
		I <sub>pp</sub> =12A, tp=8/20 μs	-	13	16		
Junction Capacitance	C <sub>J</sub>	V <sub>R</sub> =0V, f=1MHz Between I/O Pins and GND	-	150	175	pF	
Electrostatic Discharge	V <sub>ESD</sub>	IEC61000-4-2	Air	±30	-	-	kV
			Contact				

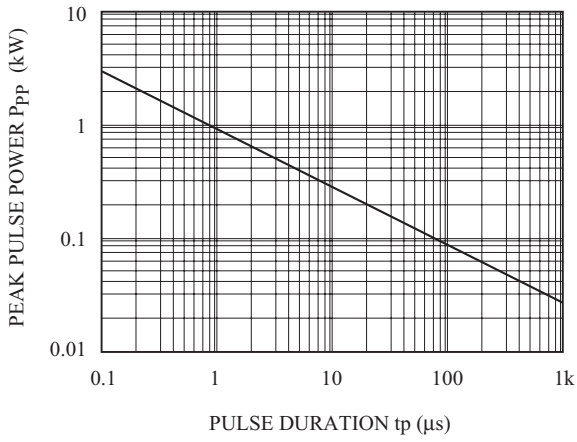


### Marking

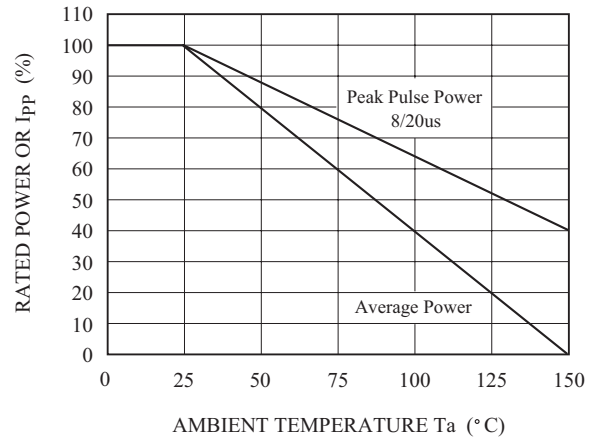


# PG05GBUSV

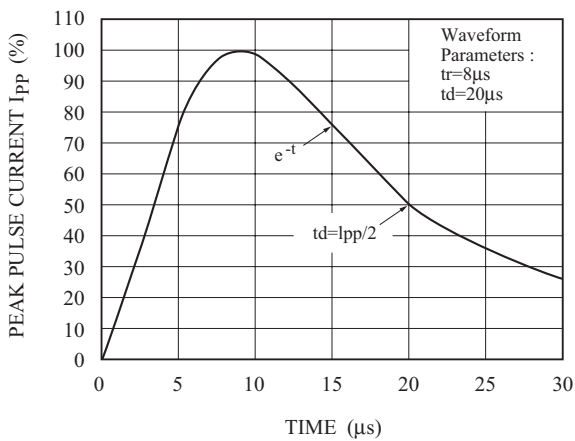
NON-REPETITIVE PEAK PULSE  
POWER VS. PULSE TIME



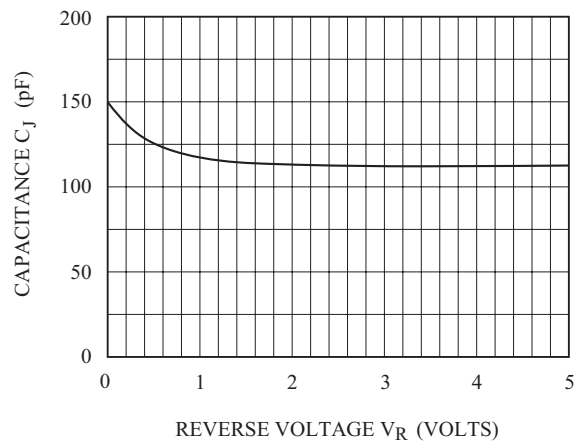
POWER DERATION CURVE



PULSE WAVEFORM



$C_J - V_R$



CLAMPING VOLTAGE VS.  
PEAK PULSE CURRENT

