

Protection in Portable Electronics Applications.

FEATURES

- 350 Watts peak pulse power ($t_p=8/20 \mu s$)
- Transient protection for data lines to
IEC61000-4-2(ESD) 15kV(Air), 8kV(Contact)
IEC61000-4-4(EFT) 40A($t_p=5/50ns$)
IEC61000-4-5(Lightning) 24A($t_p=8/20 \mu s$)
- Bidirectional Type Pin Configuration Structure.
- Small package for use in portable electronics.
- Suitable replacement for Multi-Layer Varistors in ESD protection applications.
- Protects on I/O or power line.
- Low clamping voltage.
- Low leakage current.
- Suffix **U** : Qualified to AEC-Q101.
ex) PG05GBUSC-RTK/**HU**

APPLICATIONS

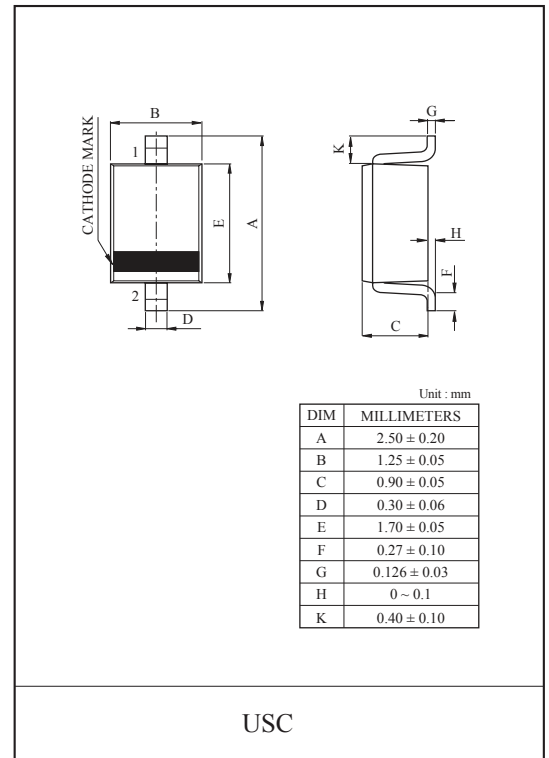
- Cell phone handsets and accessories.
- Microprocessor based equipment.
- Personal digital assistants (PDA's)
- Notebooks, desktops, & servers.
- Portable instrumentation.
- Pagers peripherals.

MAXIMUM RATING ($T_a=25^\circ C$)

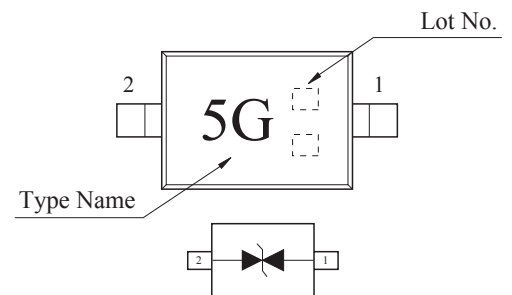
| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|----------------------------------------|-----------|-----------|------------|
| Peak Pulse Power ($t_p=8/20\mu s$) | P_{PK} | 350 | W |
| Peak Pulse Current ($t_p=8/20\mu s$) | I_{PP} | 24 | A |
| Operating Temperature | T_j | -55 ~ 150 | $^\circ C$ |
| Storage Temperature | T_{stg} | -55 ~ 150 | $^\circ C$ |

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|---------------------------|-----------|------------------------------|------|------|------|---------|
| Reverse Stand-Off Voltage | V_{RWM} | - | - | - | 5 | V |
| Reverse Breakdown Voltage | V_{BR} | $I_t=1mA$ | 6 | - | - | V |
| Reverse Leakage Current | I_R | $V_{RWM}=5V$ | - | - | 10 | μA |
| Clamping Voltage | V_C | $I_{pp}=24A, t_p=8/20 \mu s$ | - | - | 14.5 | V |
| Junction Capacitance | C_j | $V_R=0V, f=1MHz$ | - | - | 200 | pF |

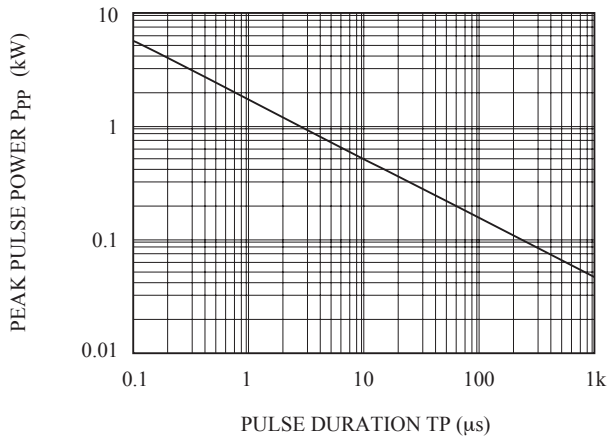


Marking

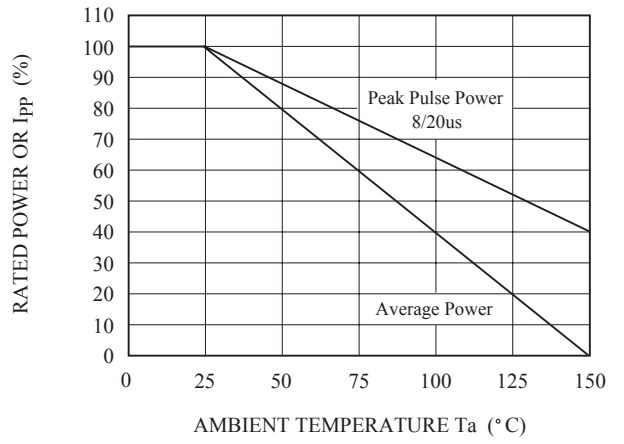


PG05GBUSC

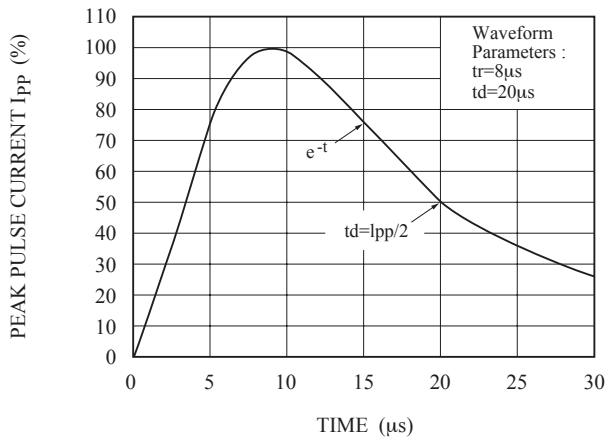
NON-REPETITIVE PEAK PULSE POWER VS. PULSE TIME



POWER DERATION CURVE



PULSE WAVEFORM



$C_J - V_R$

