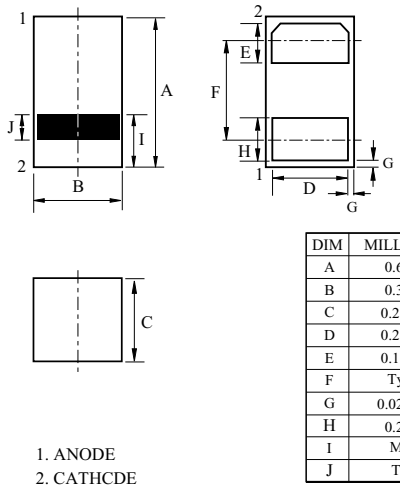
# PG05DBEL2

**TVS Diode for ESD Protection in Portable Electronics**

Protection in Portable Electronics Applications.




| DIM | MILLIMETERS |
|---|---|
| A | 0.6 ± 0.05 |
| B | 0.3 ± 0.05 |
| C | 0.28 ± 0.05 |
| D | 0.25 ± 0.05 |
| E | 0.18 ± 0.05 |
| F | Typ 0.36 |
| G | 0.025 ± 0.02 |
| H | 0.2 ± 0.05 |
| I | Max 0.3 |
| J | Typ 0.1 |

ELP-2

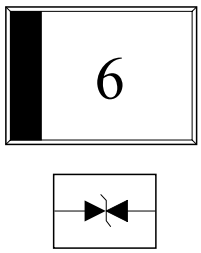
## FEATURES

- 30 Watts peak pulse power (tp=8/20 μs)
- Transient protection for data lines to
  IEC 61000-4-2(ESD) 15kV(Air), 8kV(Contact)
  IEC 61000-4-5(Lightning) 2A(tp=8/20 μs)
- Bidirectional Type Pin Configuration Structure.
- Small package for use in portable electronics.
- Suitable replacement for Multi-Layer Varistors in ESD protection applications.
- Protects one I/O or power line.
- Low clamping voltage.
- Low leakage current.

## APPLICATIONS

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

## Marking



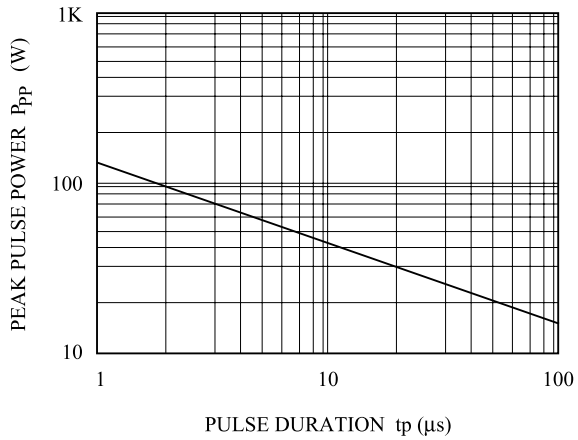

## MAXIMUM RATING (Ta=25℃)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---|---|---|---|
| Peak Pulse Power (tp=8/20 μs) | $P_{PK}$ | 30 | W |
| Junction Temperature | $T_j$ | -55 150 | ℃ |
| Storage Temperature | $T_{stg}$ | -55 150 | ℃ |

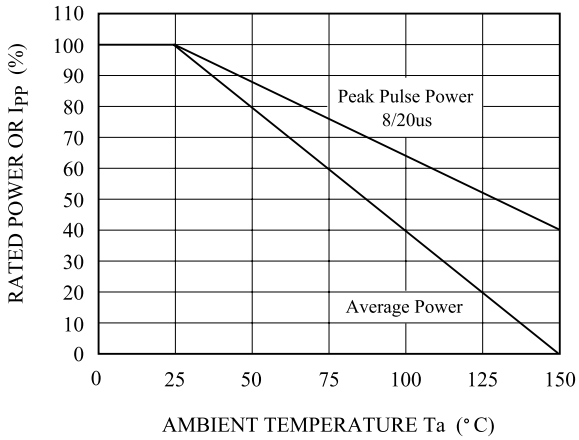
## ELECTRICAL CHARACTERISTICS (Ta=25℃)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|---|---|---|---|---|---|---|
| Reverse Stand-Off Voltage | $V_{RWM}$ | - | - | - | 5 | V |
| Reverse Breakedown Voltage | $V_{BR}$ | $I_t$=1mA | 5.8 | - | 7.8 | V |
| Reverse Leakage Current | $I_R$ | $V_{RWM}$=5V | - | - | 5 | μA |
| Clamping Voltage | $V_C$ | $I_{PP}$=2A, tp=8/20 μs | - | - | 15 | V |
| Junction Capacitance | $C_J$ | $V_R$=0V, f=1MHz | - | 5 | 9 | pF |

NON-REPETITIVE PEAK PULSE POWER VS. PULSE TIME




POWER DERATION CURVE




PULSE WAVEFORM

