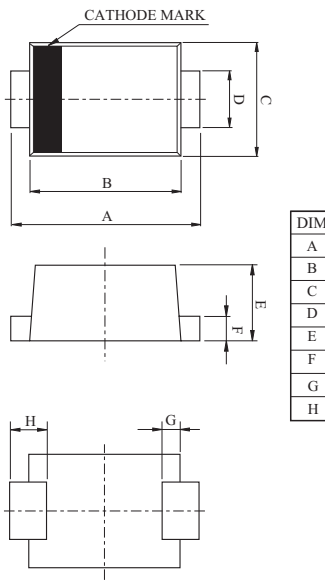
PG05DBTFC

TVS Diode for ESD Protection in Portable Electronics

Protection in Portable Electronics Applications.



DIM	MILLIMETERS
A	1.00±0.05
B	0.80+0.10/-0.05
C	0.60±0.05
D	0.30±0.05
E	0.40 MAX
F	0.13±0.05
G	0.10 MAX
H	0.25 MAX

TFSC

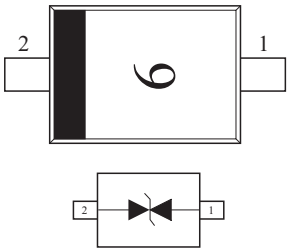
FEATURES

- 50 Watts peak pulse power (tp=8/20 μs)
- Transient protection for data lines to
  IEC61000-4-2(ESD) 15kV(Air), 8kV(Contact)
  IEC61000-4-4(EFT) 40A(tp=5/50ns)
  IEC61000-4-5(Lightning) 5A(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.
- Suffix **U** : Qualified to AEC-Q101.
  ex) PG05DBTFC-RTK/H**U**

APPLICATIONS

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

Marking



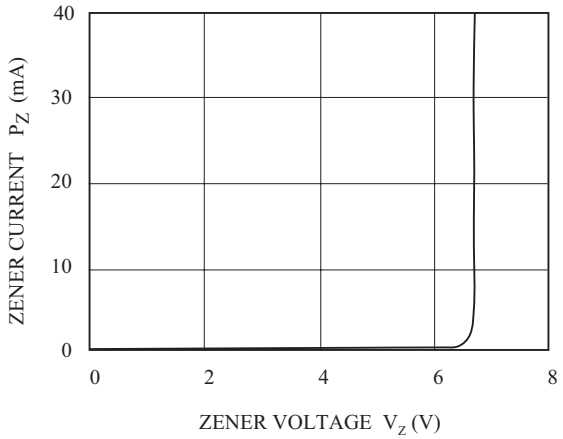
MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Pulse Power (tp=8/20 μs)	P_{PK}	50	W
Junction Temperature	T_j	-55 150	℃
Storage Temperature	T_{stg}	-55 150	℃

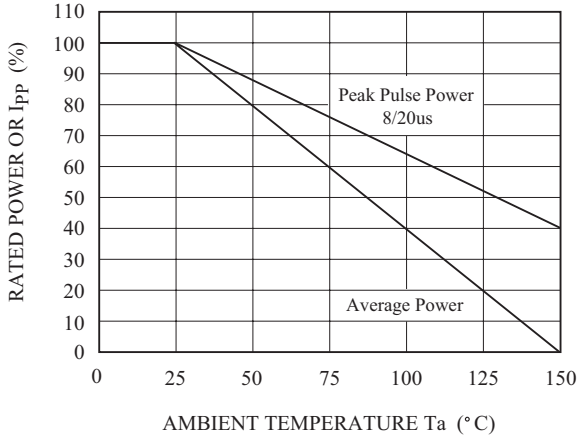
ELECTRICAL CHARACTERISTICS (Ta=25℃)

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	-	0.5	1	μA
Clamping Voltage	V_C	I_{PP}=±5A, tp=8/20 μs	-	-	±17	V
Junction Capacitance	C_J	V_R=0V, f=1MHz	-	15	25	pF

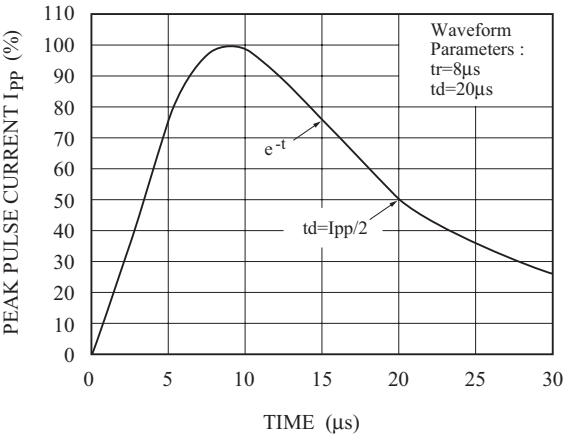
V_Z - I_Z



POWER DERATION CURVE



PULSE WAVEFORM



P_D - Ta