PG05BAUSM

TVS Diode for ESD Protection in Portable Electronics

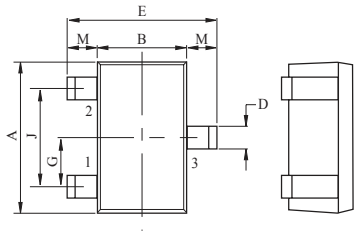
Protection in Portable Electronics Applications.

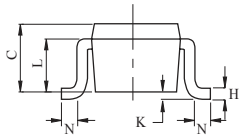
FEATURES

- Transient protection for data lines to IEC61000-4-2(ESD) 15kV(Air), 8kV(Contact)
- 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) PG05BAUSM-RTK/H**U**

APPLICATIONS

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





DIM	MILLIMETERS
A	2.00±0.20
B	1.25±0.15
C	0.90±0.10
D	0.3+0.10/-0.05
E	2.10 ± 0.20
G	0.65
H	0.15+0.1/-0.06
J	1.30
K	0.00~0.10
L	0.70
M	0.42±0.10
N	0.10 Min.

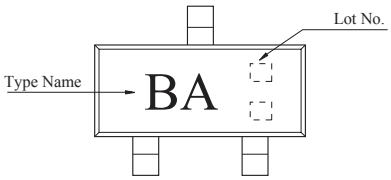
1. (TVS) D1 CATHODE
2. (TVS) D2 CATHODE
3. COMMON ANODE

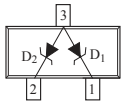
USM

MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Pulse Power with 8/20us Waveform	P_{PK}	10	W
Peak Pulse Current with 8/20us Waveform	I_{PP}	1	A
Junction Temperature	T_j	150	℃
Storage Temperature	T_{stg}	-55 ~ 150	℃

Marking

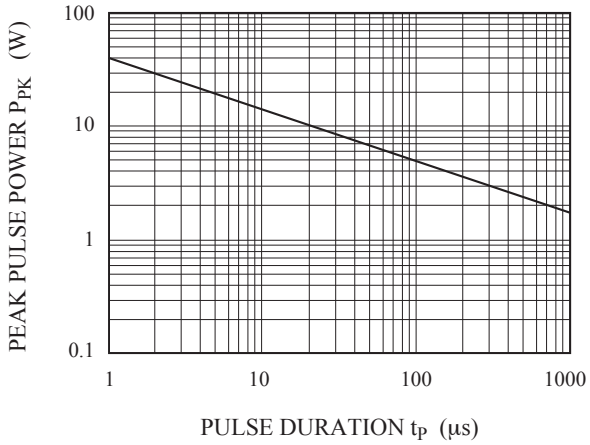




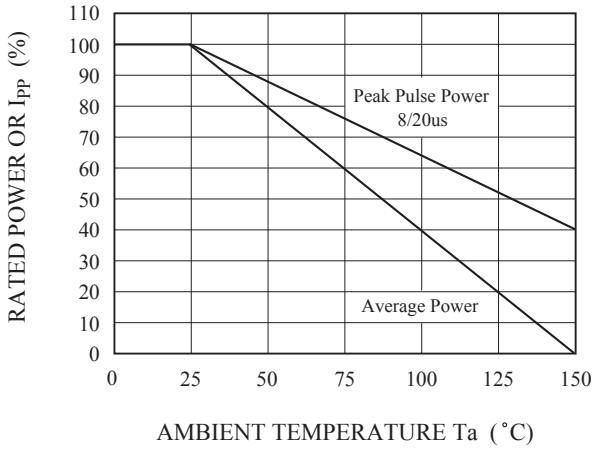
ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Reverse Stand-Off Voltage	V_{RWM}	-		-	-	5	V
Reverse Breakdown Voltage	V_{BR}	I_t=5mA		6.46	-	7.14	V
Reverse Leakage Current	I_R	V_{RWM}=5V		-	-	0.5	μA
Total Capacitance	C_T	V_R=0V, f=1MHz		-	3	-	pF
Clamping Voltage	V_C	I_{PP}=1A, tp=8/20us		-	8.8	10	V
Electrostatic Discharge	V_{ESD}	IEC61000-4-2	Air	±15	-	-	kV
			Contact	± 8	-	-	kV

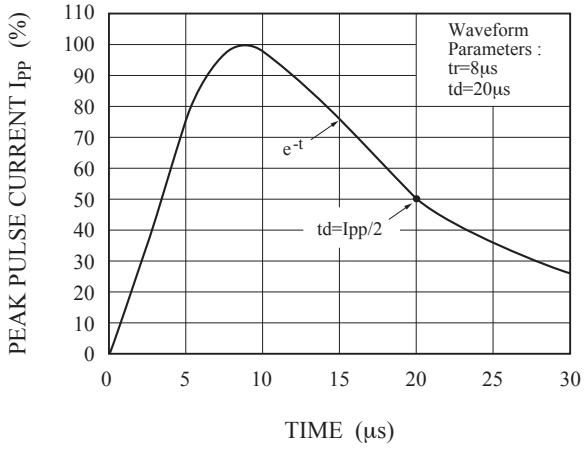
NON-REPETITIVE PEAK PULSE POWER VS. PULSE TIME



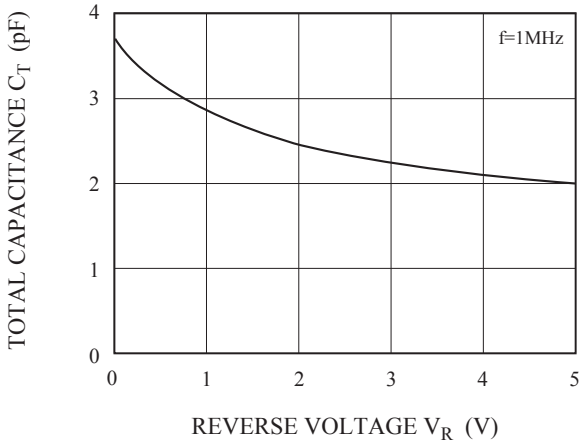
POWER DERATION CURVE



PULSE WAVEFORM



C_T - V_R



I_{PP} - V_C