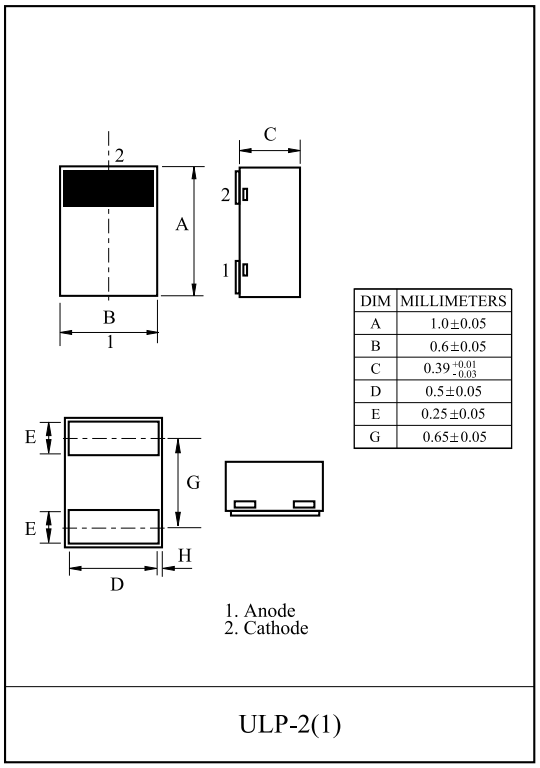
PG05UBUL2

Single Line TVS Diode for ESD Protection in Portable Electronics

Protection in Portable Electronics Applications.



DIM	MILLIMETERS
A	1.0±0.05
B	0.6±0.05
C	$0.39^{+0.01}_{-0.03}$
D	0.5±0.05
E	0.25±0.05
G	0.65±0.05

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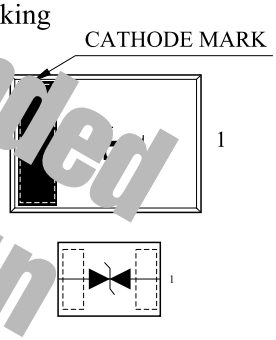
FEATURES

- Transient protection for data lines to
  IEC 61000-4-2(ESD) : ±20kV(air/contact)
  IEC 61000-4-4(EFT) : 2.5kV/50A
  IEC 61000-4-5(Surge) 3A(tp=8/20 μs)
- Small package for use in portable electronics.
- Suitable replacement for Multi-Layer Varistors in ESD protection applications.
  (* Multi-Layer Varistors [0402 Size])
- Protects on I/O or power line.
- Low clamping voltage.
- Low leakage current.

APPLICATIONS

- USB 2.0, 10/100/1000 Ethernet, FireWire, DVI, HDMI, S-ATA
- Mobile Communication
- Consumer Products (STB, TV, DVD, DSC...)
- LCD-Display, Camera
- Notebooks and desktop computers, peripherals

Marking



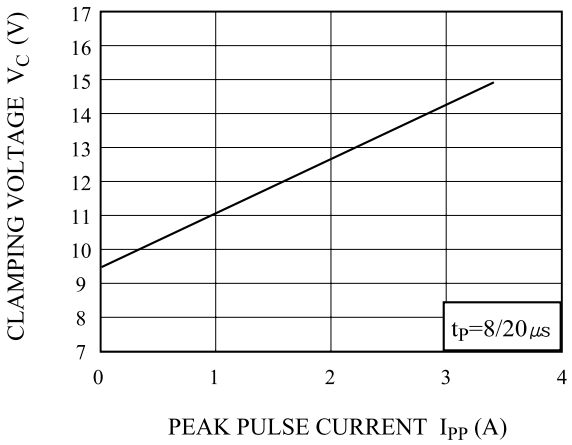
MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Pulse Power (tp=8/20 μs)	P_{PK}	63	W
Peak Pulse Current (tp=8/20 μs)	I_{PP}	3	A
Operating Temperature Range	T_{OP}	-55 125	℃
Storage Temperature	T_{stg}	-55 150	℃

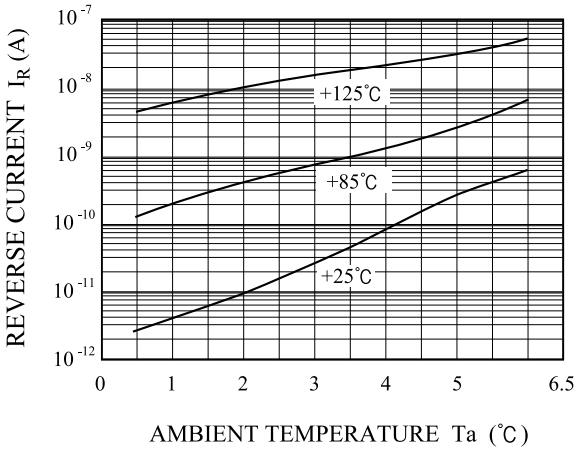
ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Stand-Off Voltage	V_{RWM}	-	5.3	-	5.3	V
Reverse Breakdown Voltage	V_{BR}	I_t=1mA	7	-	-	V
Reverse Leakage Current	I_R	V_{RWM}=5.3V	-	-	100	nA
Clamping Voltage	V_C	I_{PP}=1A, tp=8/20 μs	-	11	-	V
		I_{PP}=3A, tp=8/20 μs	-	14	21	
Junction Capacitance	C_J	V_R=0V, f=1MHz	-	0.27	0.4	pF

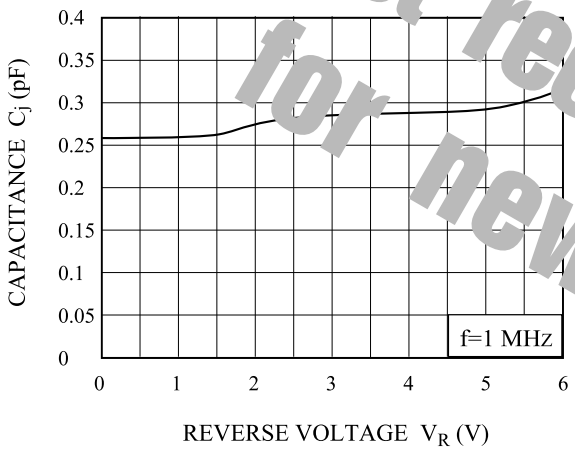
CLAMPING VOLTAGE



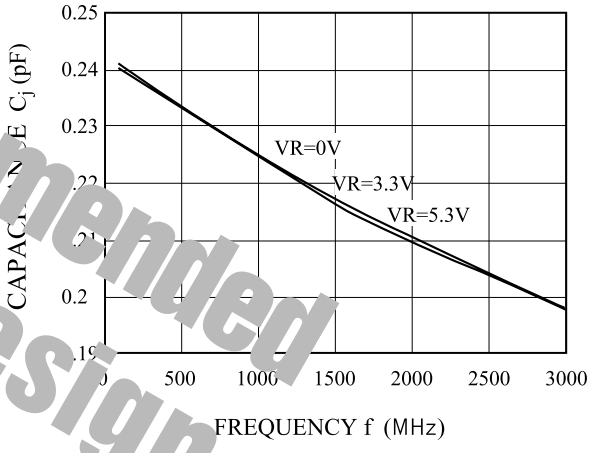
REVERSE CURRENT



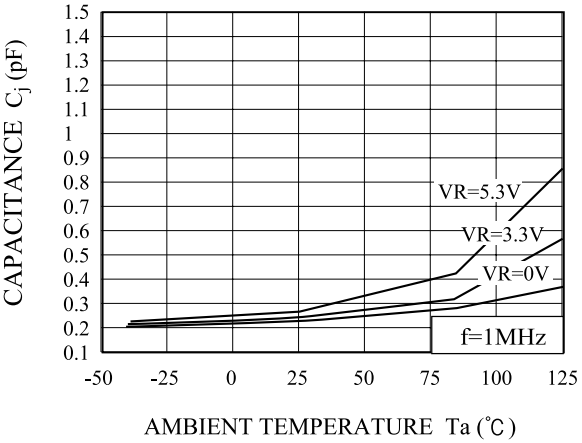
CAPACITANCE

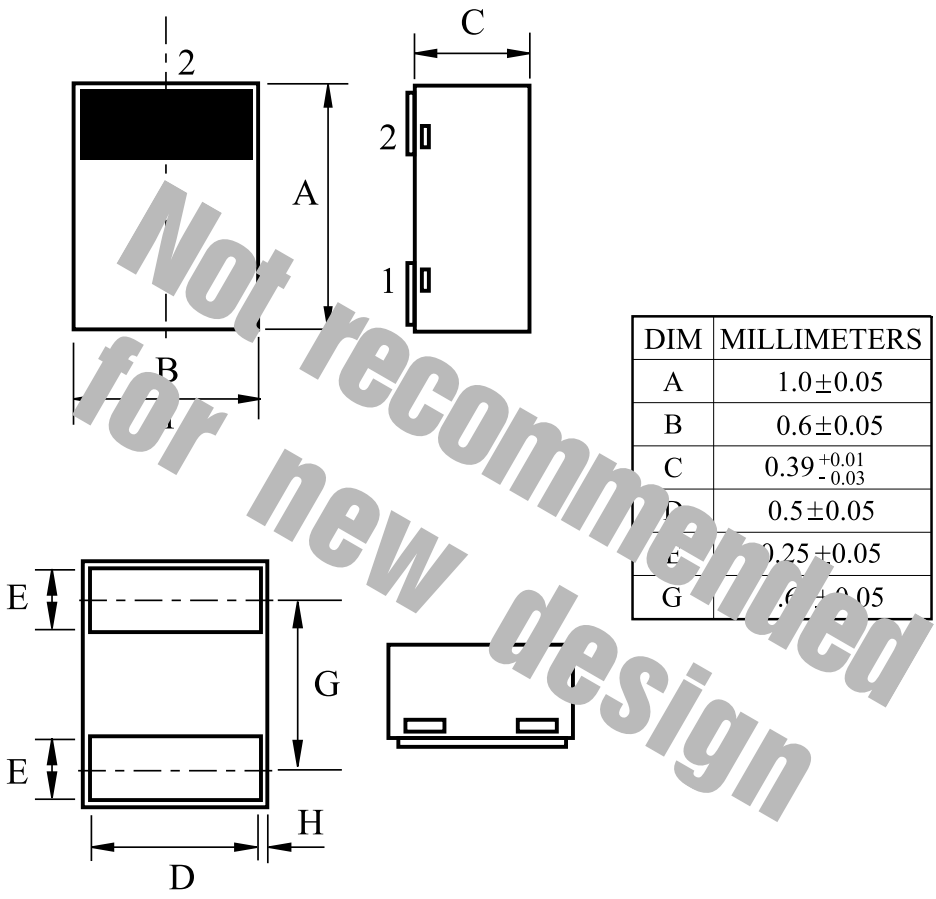


LINE CAPACITANCE



LINE CAPACITANCE





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1. Anode
2. Cathode

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