

Protection in Portable Electronics Applications.

FEATURES

- Transient protection for data lines to
 - IEC61000-4-2(ESD) : Air mode $\pm 20\text{kV}$ /Contact mode $\pm 15\text{kV}$
 - IEC61000-4-5(Lightning) 2A($t_{\text{p}}=8/20\ \mu\text{s}$)
- Low capacitance $C_T = 9\text{pF}(\text{Max})$
- Bi-directional, symmetrical working voltage up to : $V_{\text{RWM}} = 5\text{V}$
- Extremely small Size $0.6 \times 0.3 \times 0.3\text{mm}$
- Low reverse current : 70nA typical ($V_R=5\text{V}$)



ELP-2A (leadless-type)

PRODUCT DESCRIPTION

- Molding compound flammability rating : UL 94V-0
- Pb-Free, Halogen-Free, RoHs Compliant

Package dimensions (ELP-2A)	Pin configurations (Bi-directional)																		
<p>Dimensions:</p> <table border="1"> <tr> <td>DIM</td><td>MILLIMETERS</td></tr> <tr> <td>A</td><td>0.60 ± 0.05</td></tr> <tr> <td>B</td><td>0.30 ± 0.05</td></tr> <tr> <td>C</td><td>0.30 ± 0.05</td></tr> <tr> <td>D</td><td>0.23 ± 0.05</td></tr> <tr> <td>E</td><td>0.15 ± 0.05</td></tr> <tr> <td>F</td><td>BSC 0.37</td></tr> <tr> <td>G1</td><td>BSC 0.04</td></tr> <tr> <td>G2</td><td>BSC 0.035</td></tr> </table>	DIM	MILLIMETERS	A	0.60 ± 0.05	B	0.30 ± 0.05	C	0.30 ± 0.05	D	0.23 ± 0.05	E	0.15 ± 0.05	F	BSC 0.37	G1	BSC 0.04	G2	BSC 0.035	<p>1. ANODE 2. ANODE</p>
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ORDERING INFORMATION

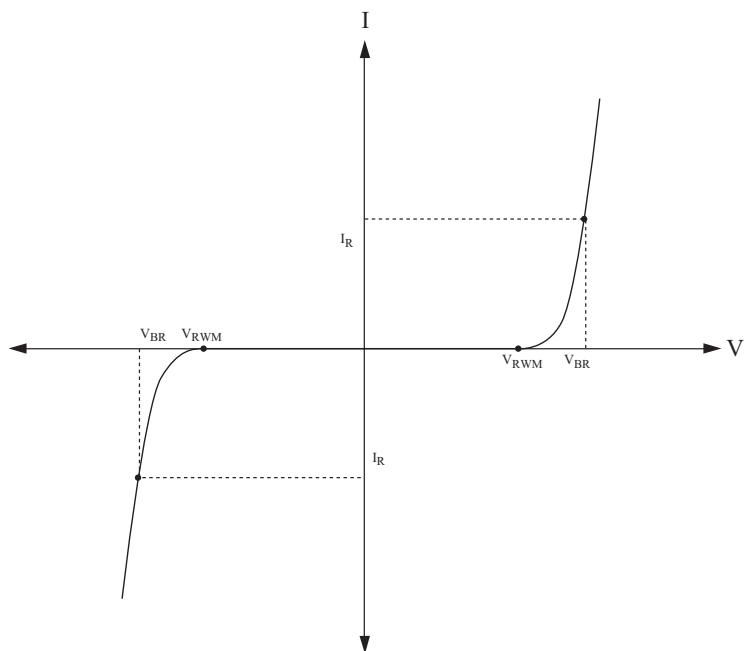
Part Number	Qty per Reel	Reel Size	Marking code
PG05DBEL2A-RTK	5,000		
PG05DBEL2A-RTL	10,000		
PG05DBEL2A-RTH	5,000		
PG05DBEL2A-RTR	10,000	7 inch	B

PG05DBEL2A

MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Pulse Power (tp=8/20 µs)	P _{PK}	30	W
Peak Pulse Current(tp=8/20 µs)	I _{PP}	2	A
Junction Temperature	T _J	150	
Storage Temperature	T _{STG}	-55 ~ 150	

DEFINITIONS OF ELECTRICAL CHARACTERISTIC SYMBOL

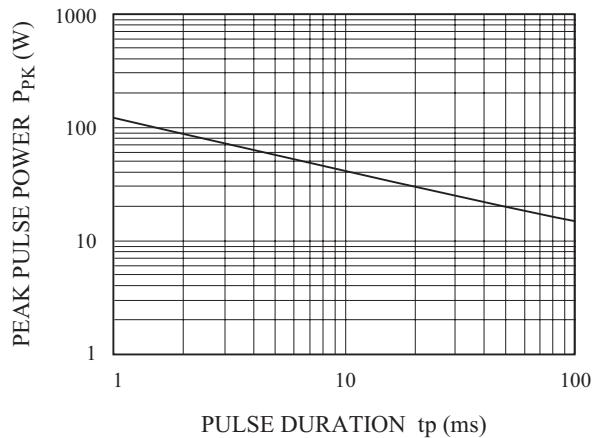


ELECTRICAL CHARACTERISTICS (Ta=25 °C)

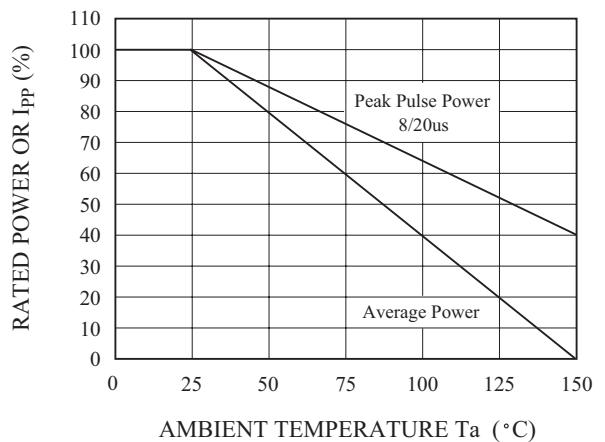
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Stand-Off Voltage	V _{RWM}	-	-	-	5	V
Reverse Breakdown Voltage	V _{BR}	I _f =1mA	5.8	7.5	7.8	V
Reverse Leakage Current	I _R	V _{RWM} =5V	-	70	100	nA
Clamping Voltage	V _C	I _{PP} =2A, tp=8/20 µs	-	12.5	15	V
		I _{TLP} =4A, tp=100ns	-	15	20	V
Total Capacitance	C _T	V _R =0V, f=1MHz	-	5	9	pF
Electrostatic Discharge	V _{ESD}	IEC61000-4-2	Air	± 20	-	kV
			Contact	± 15		

PG05DBEL2A

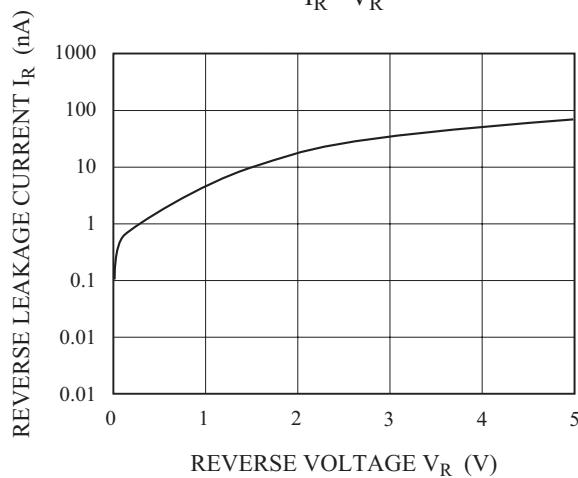
NON-REPETITIVE PEAK PULSE
POWER VS. PULSE TIME



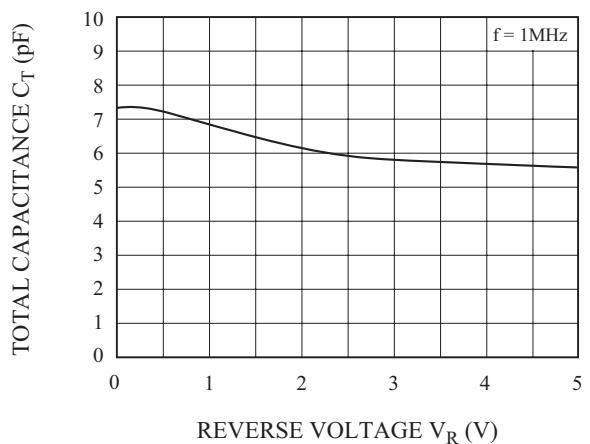
POWER DERATION CURVE



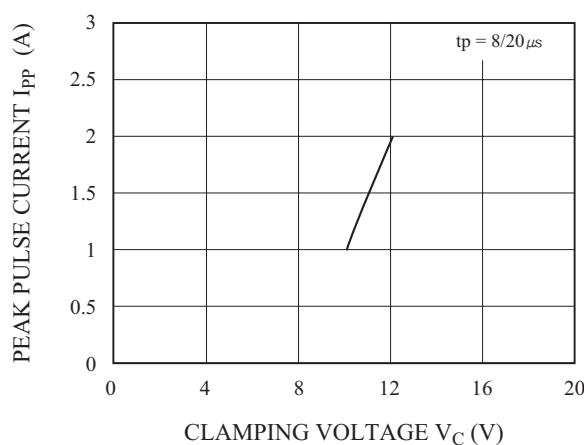
$I_R - V_R$



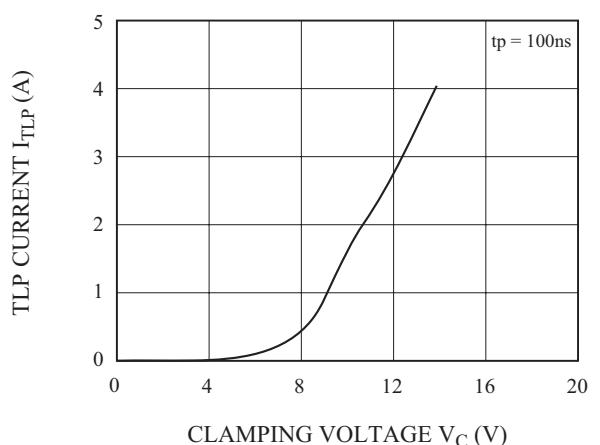
$C_T - V_R$



$I_{PP} - V_C$

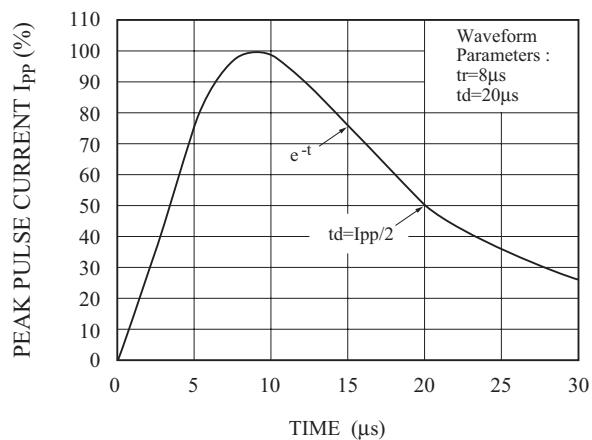


$I_{TLP} - V_C$



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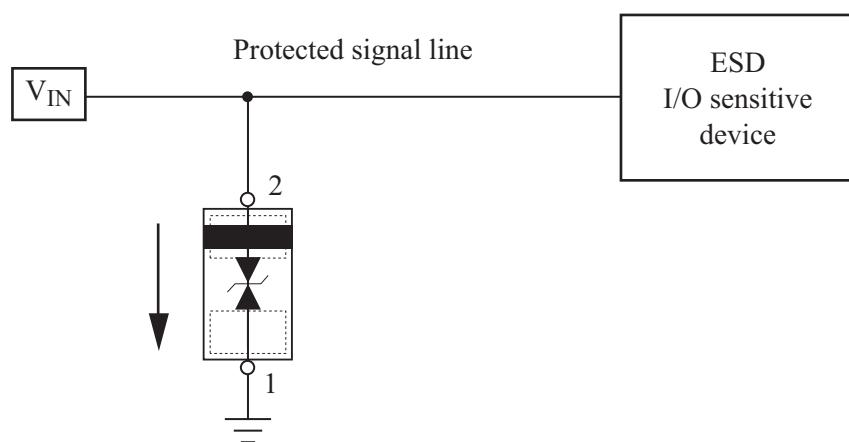
PULSE WAVEFORM



PG05DBEL2A

APPLICATIONS

- Cell phone handsets and accessories.
- Microprocessor based equipment.
- Notebooks, desktops, & servers.
- Portable instrumentation.
- Pagers peripherals.



Recommended pad dimension & Marking Information

Recommended pad dimension	Marking Code
<p>Diagram showing the recommended pad dimensions. Two pads are shown. The distance between the left edge of the left pad and the right edge of the right pad is 0.4. The distance between the top edge of the left pad and the top edge of the right pad is 0.3. The distance between the top edge of the right pad and its cathode mark is 0.21.</p>	<p>Diagram showing the marking code. A rectangle is divided into two vertical sections. The left section is labeled '2' at the bottom. The right section is labeled 'B' at the bottom. An arrow points to the right section with the label "CATHODE MARK". The right edge of the rectangle is labeled '1'.</p>