

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($t_p=8/20 \mu\text{s}$)
- Low capacitance $C_T = 9\text{pF}$ (Max)
- Bi-directional, symmetrical working voltage up to : $V_{RWM} = 5\text{V}$
- 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)																		
<table border="1"> <thead> <tr> <th>DIM</th> <th>MILLIMETERS</th> </tr> </thead> <tbody> <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> </tbody> </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

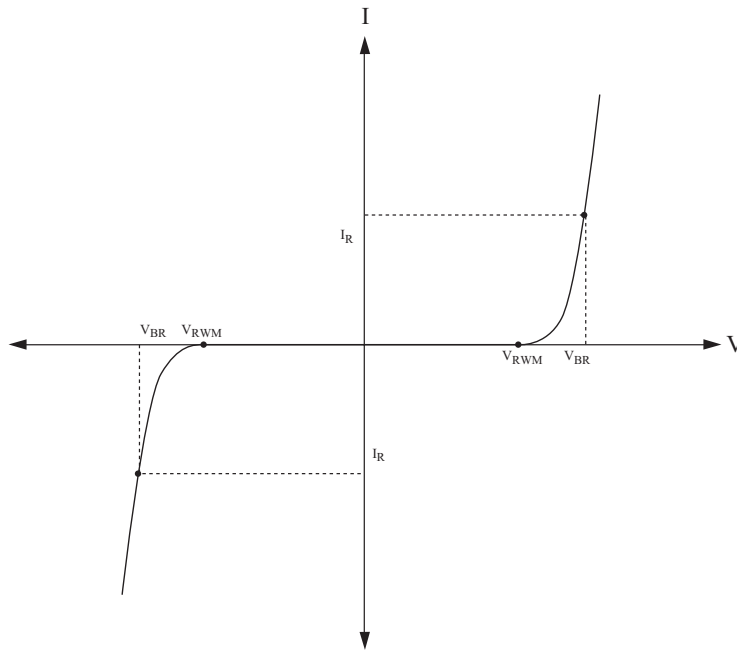
Part Number	Qty per Reel	Reel Size	Marking code
PG05DBEL2A-RTK	5,000	7 inch	B
PG05DBEL2A-RTL	10,000		
PG05DBEL2A-RTH	5,000		
PG05DBEL2A-RTR	10,000		

PG05DBEL2A

MAXIMUM RATING (Ta=25)

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

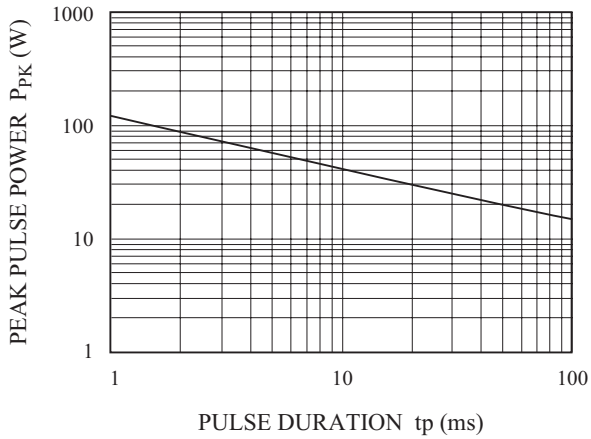


ELECTRICAL CHARACTERISTICS (Ta=25)

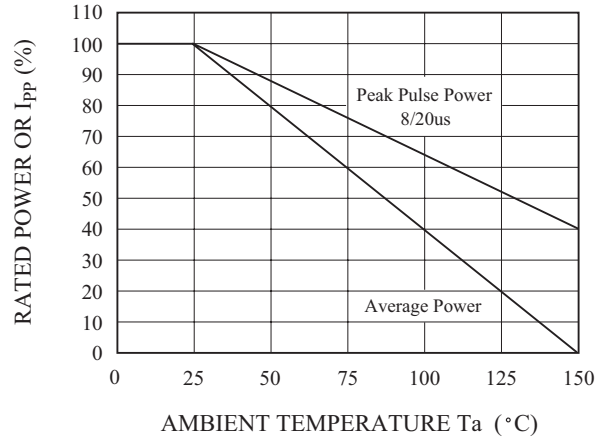
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	5	V	
Reverse Breakdown Voltage	V_{BR}	$I_F=1mA$	5.8	7.5	7.8	V	
Reverse Leakage Current	I_R	$V_{RWM}=5V$	-	70	100	nA	
Clamping Voltage	V_C	$I_{PP}=2A, tp=8/20 \mu s$	-	12.5	15	V	
		$I_{TLP}=4A, tp=100ns$	-	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

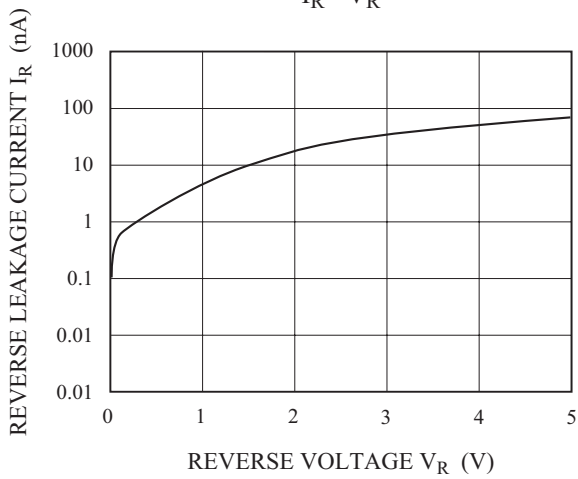
NON-REPETITIVE PEAK PULSE
POWER VS. PULSE TIME



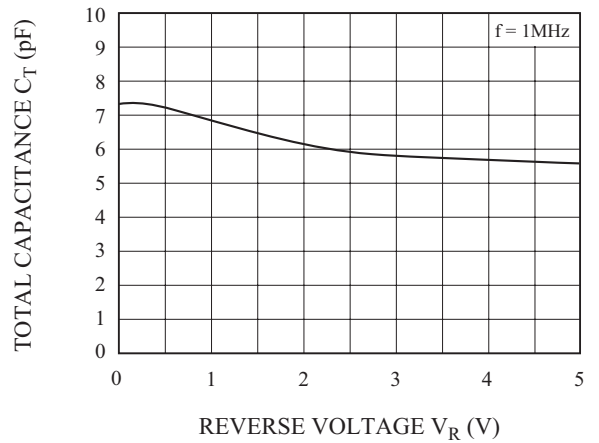
POWER DERATION CURVE



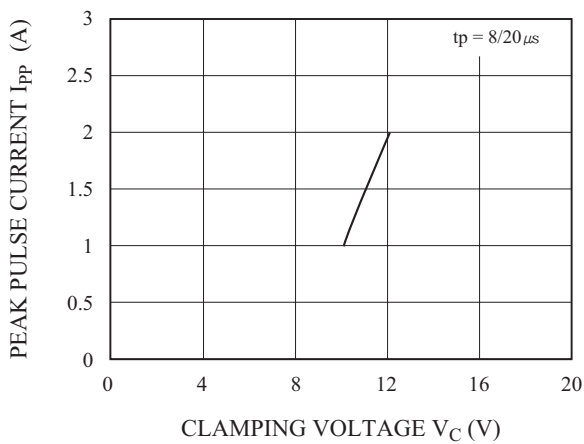
$I_R - V_R$



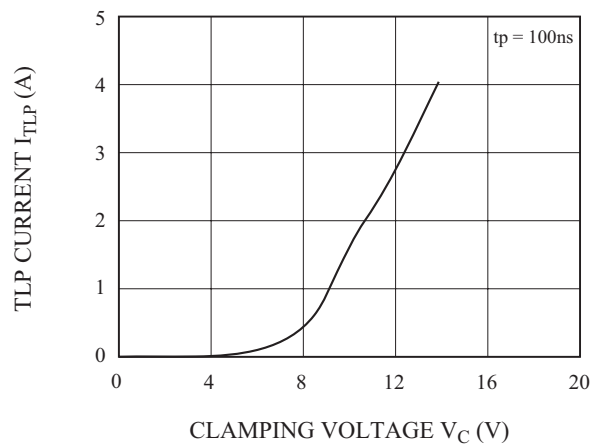
$C_T - V_R$



$I_{PP} - V_C$

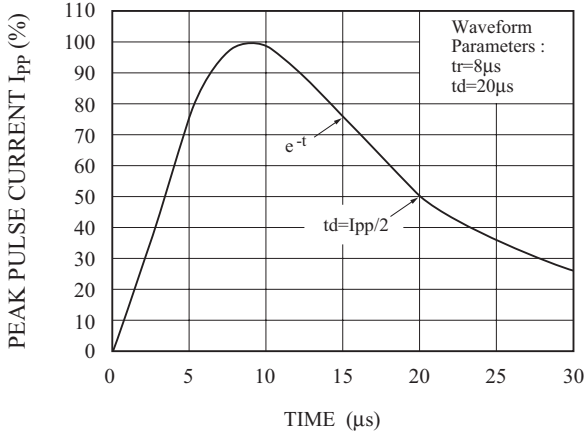


$I_{TLP} - V_C$



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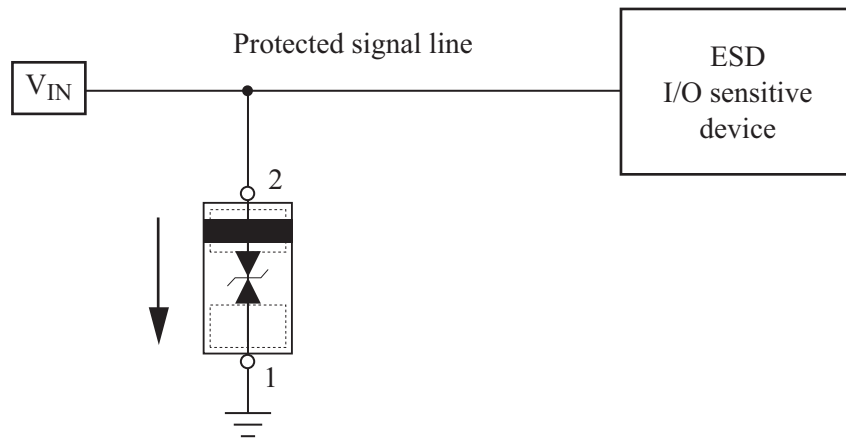
PULSE WAVEFORM



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