

Protection in Portable Electronics Applications.

FEATURES

- Transient protection for data lines to
 - IEC61000-4-2(ESD) : Air mode $\pm 25\text{kV}$ / Contact mode $\pm 20\text{kV}$
 - IEC61000-4-4(EFT) : $\pm 50\text{A}$ (5/50ns)
 - IEC61000-4-5(Surge) : 4A (tp=8/20 μs)
- Low capacitance $C_T = 0.9\text{pF}(\text{Max})$
- Uni-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 : 5nA 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 (Uni-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	1. ANODE 2. CATHODE
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ORDERING INFORMATION

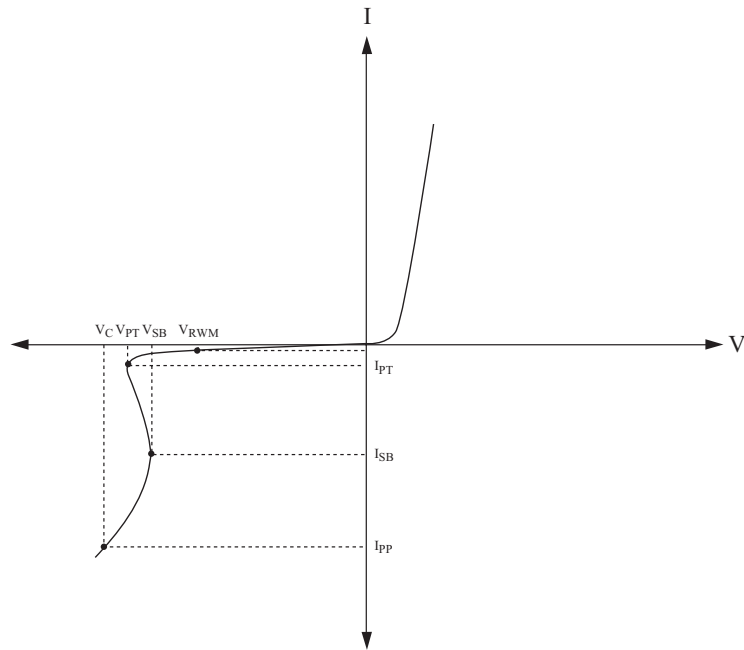
Part Number	Qty per Reel	Reel Size	Marking code
PS05TSEL2A-RTK	5,000	7 inch	E
PS05TSEL2A-RTL	10,000		
PS05TSEL2A-RTH	5,000		
PS05TSEL2A-RTR	10,000		

PS05TSEL2A

MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Pulse Power (tp=8/20 μs)	P _{PK}	60	W
Peak Pulse Current (tp=8/20 μs)	I _{PP}	4	A
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-55 150	°C

DEFINITIONS OF ELECTRICAL CHARACTERISTIC SYMBOL

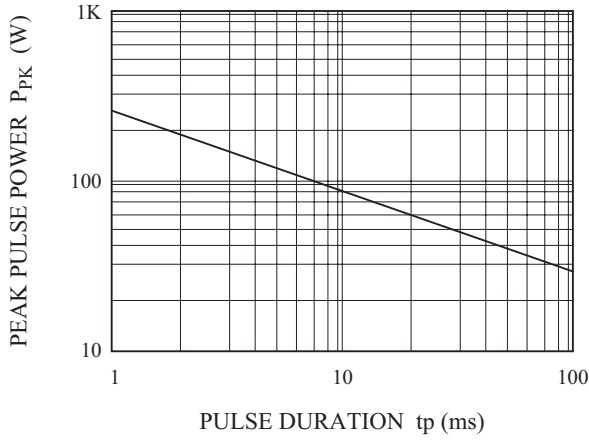


ELECTRICAL CHARACTERISTICS (Ta=25°C)

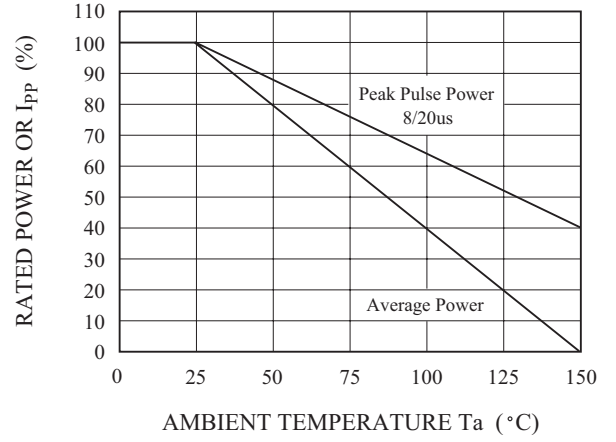
CHARACTERISTIC	SYMBOL	TEST CONDITION		MIN.	TYP.	MAX.	UNIT
Reverse Stand-Off Voltage	V _{RWM}	-		-	-	5	V
Reverse Leakage Current	I _R	V _{RWM} =5V		-	5	100	nA
Snap-back Voltage	V _{SB}	-		5.5	-	-	V
Punch-through Voltage	V _{PT}	-		6	-	-	V
Total Capacitance	C _T	V _R =0V, f=1MHz		-	0.7	0.9	pF
Clamping Voltage	V _C	I _{PP} =1A, tp=8/20 μs		-	10	13	V
		I _{PP} =4A, tp=8/20 μs		-	12	15	
		I _{TLP} =4A, tp=100ns		-	11	15	
		I _{TLP} =20A, tp=100ns		-	21	25	
Electrostatic Discharge	V _{ESD}	IEC61000-4-2	Air	±25	-	-	kV
			Contact	±20			

PS05TSEL2A

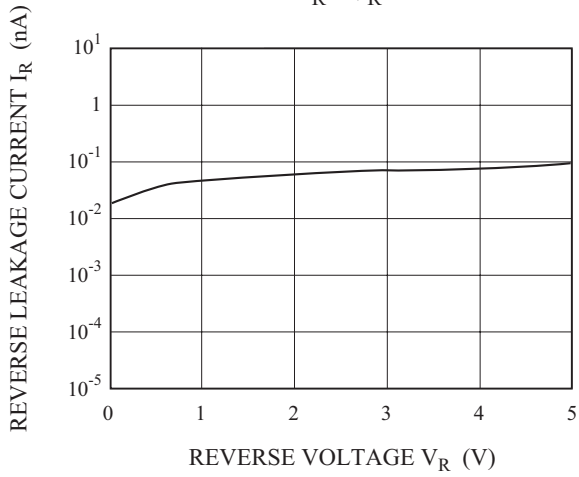
NON-REPETITIVE PEAK PULSE
POWER VS. PULSE TIME



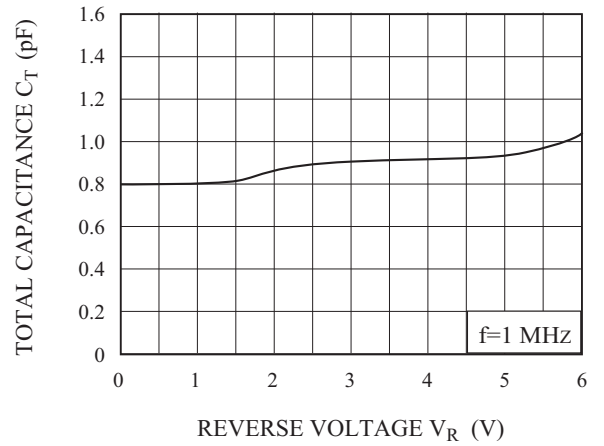
POWER DERATION CURVE



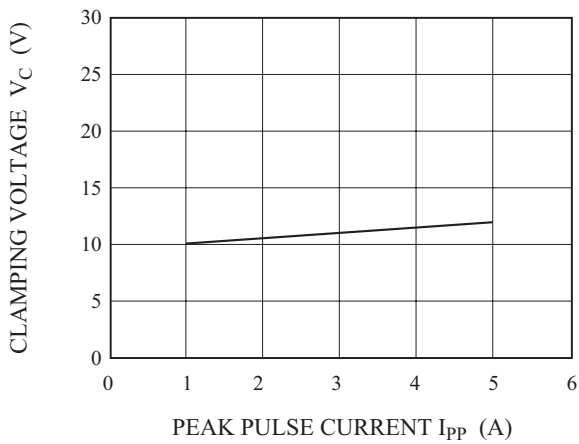
$I_R - V_R$



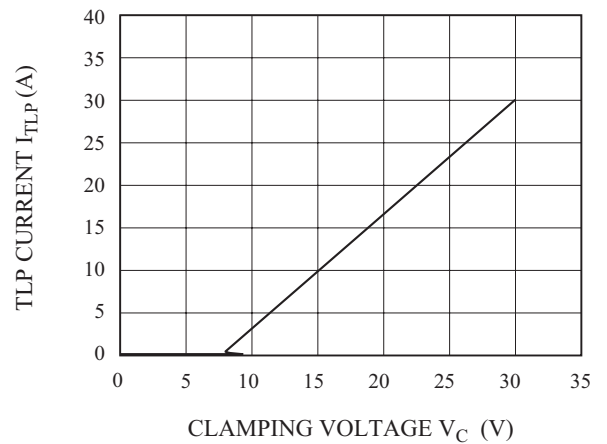
$C_T - V_R$



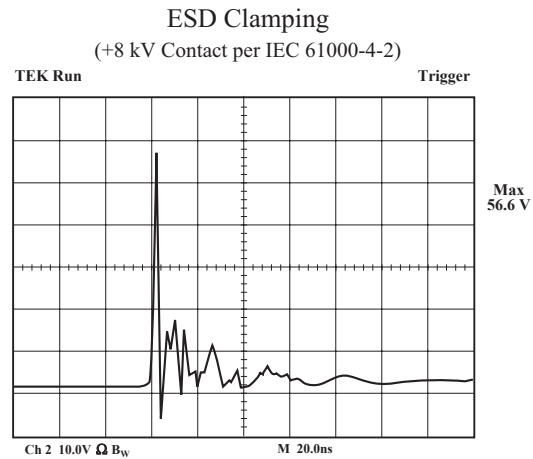
$V_C - I_{pp}$



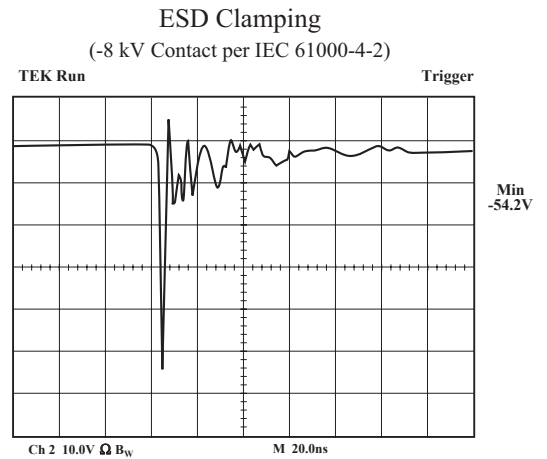
$I_{TLP} - V_C$



PS05TSEL2A

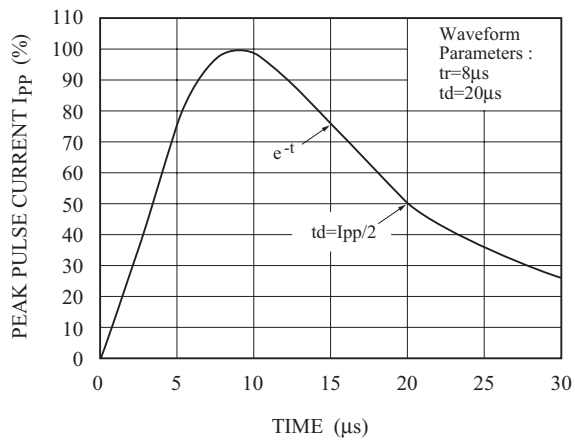


Note : Data is taken with a 10x attenuator



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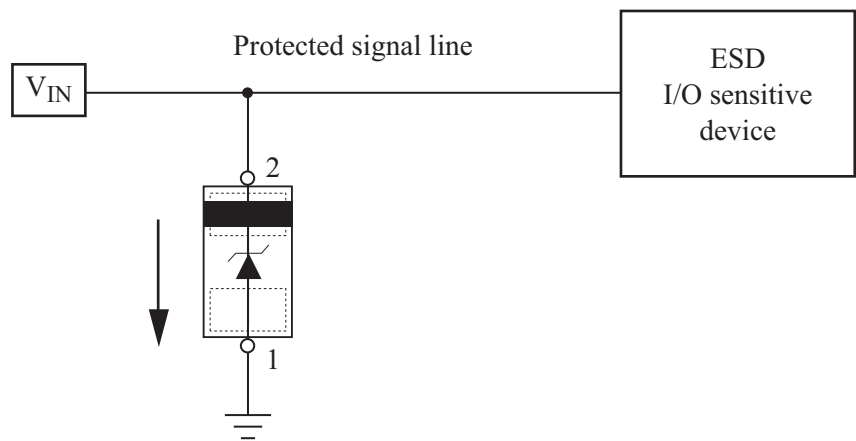
PULSE WAVEFORM



PS05TSEL2A

APPLICATIONS

- USB 2.0, USB 3.0, 10/100/1000 Ethernet, DVI, HDMI, S-ATA
- MDDI Port
- LCD-Display, Camera
- GPS / FM Antennas
- LVDS
- High speed data lines



Recommended pad dimension & Marking Information

Recommended pad dimension	Marking Code
