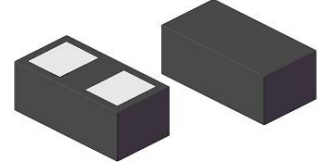


Features

- 100 Watts Peak Pulse Power ($T_p = 8/20\mu s$)
- Bi-Directional Configuration
- Snap-Back Technology
- Low Clamping Voltage
- Low Leakage Current
- Ultra Low Capacitance (0.30pF typical)
- ESD Protection for High-Speed Data Lines to:
 IEC 61000-4-2 $\pm 16KV$ Contact, $\pm 20KV$ Air
 IEC 61000-4-4 (EFT) 40A (5/50ns)
 IEC 61000-4-5 (Lightning) 10A (8/20 μs)
- RoHS Compliant



ECP0201

Applications

- USB 3.0, USB 2.0, MHL
- HDMI 2.0, Display Port 1.3, eSATA
- Unified Display Interface (UDI)
- Digital Visual Interface (DVI)
- 1G/2.5G/5G/10G Ethernet



Schematic Diagram

Absolute Maximum Ratings ($T_A=25^\circ C$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_p=8/20\mu S$)	P_{PP}	100	W
Peak Pulse Current ($T_p=8/20\mu S$)	I_{PP}	10	A
Junction Temperature	T_J	-55 To +125	$^\circ C$
Storage Temperature	T_{STG}	-55 To +150	$^\circ C$

Electrical Characteristics ($T_A=25^\circ C$ unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse Stand-off Voltage	V_{RWM}	-	-	-	18	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	20	25	30	V
Reverse Leakage Current	I_R	$V_R=18V$	-	0.01	0.1	μA
Trigger Voltage	V_T	$I_{PP}=10A, T_p=8/20\mu S$	-	29	-	V
Clamping Voltage	V_C	$I_{PP}=10A, T_p=8/20\mu S$	-	10	-	V
Dynamic Resistance	R_{dyn}	$I_T=0$ to 30A, $T_p=TLP$	-	0.25	-	Ω
Junction Capacitance	C_J	$V_R=0V, f=1MHz, I/O$ to GND	-	0.3	0.5	pF

Typical Characteristic Curves

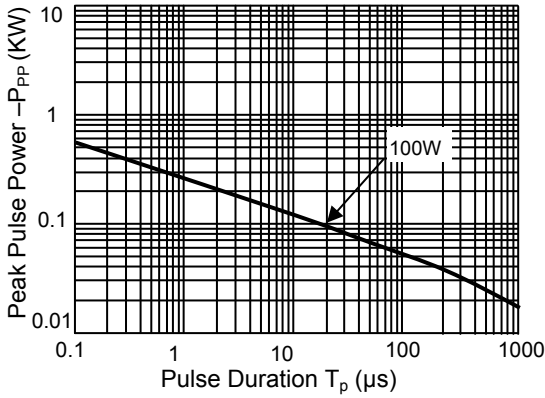


Figure 1. Peak Pulse Power Rating Curve

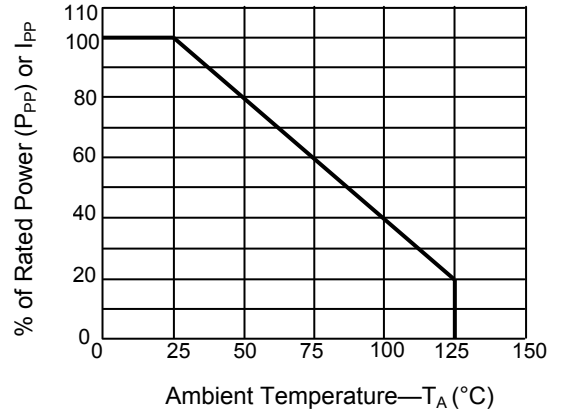


Figure 2. Pulse Derating Curve

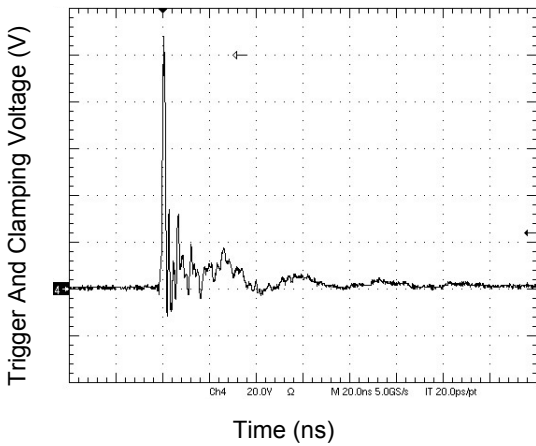


Figure 3. IEC61000-4-2 +8kV Contact Discharge

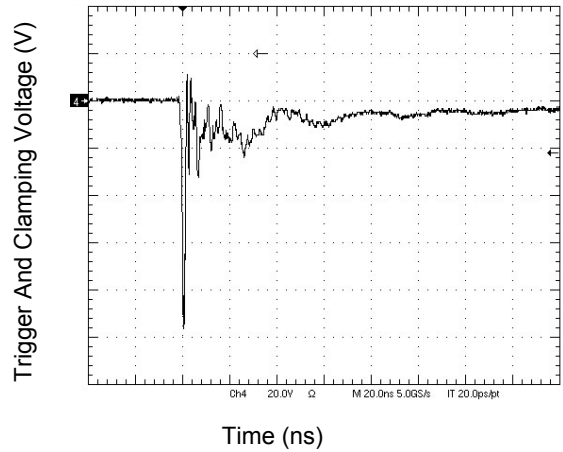


Figure 4. IEC61000-4-2 -8kV Contact Discharge

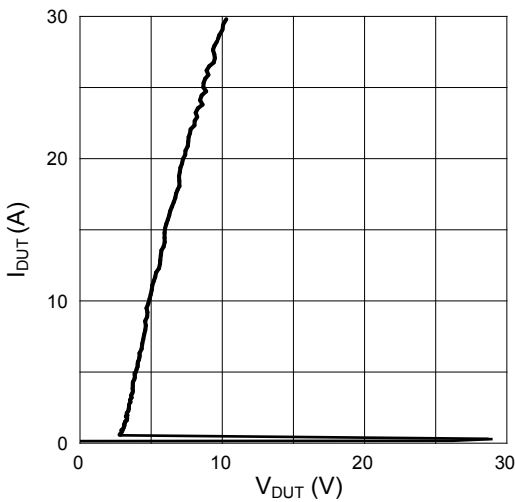


Figure 5. Transmission Line Pulse ($T_p=100ns$)

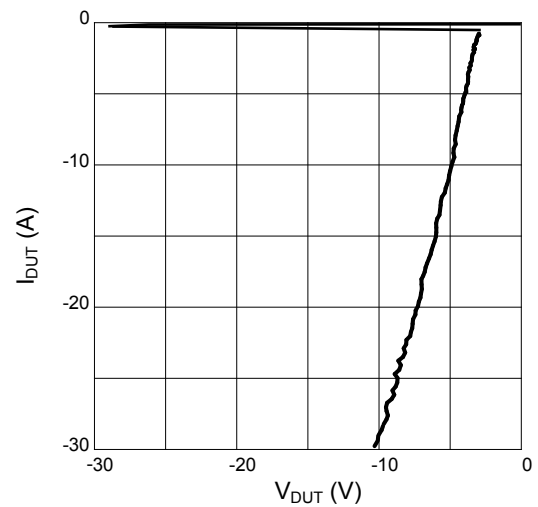
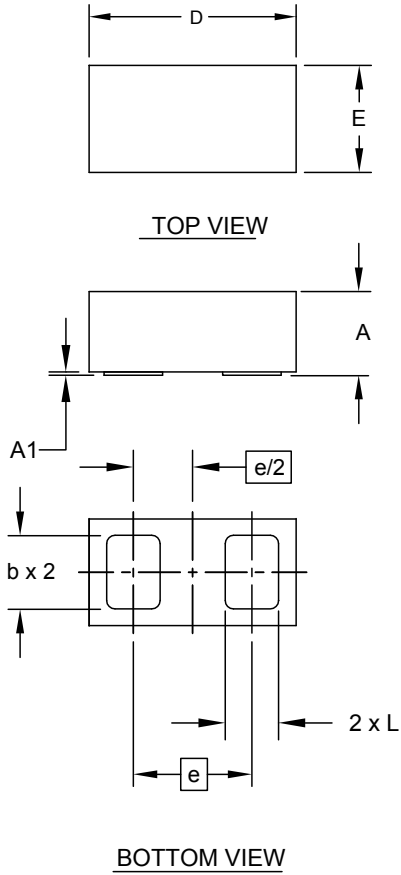


Figure 6. Transmission Line Pulse ($T_p=100ns$)

Product Dimensions ECP0201



DIM	DIMENSIONS		
	MILLIMETERS		
	MIN	NOM	MAX
A	0.185	0.206	0.227
A1	0.000	0.010	0.050
b	0.200	0.220	0.240
D	0.590	0.615	0.640
E	0.290	0.315	0.340
e	0.355 BSC		
L	0.140	0.160	0.180

Order Information

Device	Package	Marking	Carrier	Quantity	HSF Status
GSECA18B003	ECP0201	X	Tape & Reel	10,000pcs	RoHS Compliant