

**Features**

- Protection One Line I/O Port
- Low Reverse Clamping Voltage
- Ultra Low Capacitance
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

**Maximum Ratings**

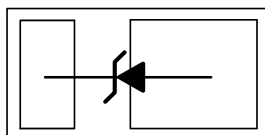
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C

MCC Part Number	Device Marking
ESD0561P1	6A

IEC61000-4-2(ESD)	Air Contact	±30KV ±30KV
IEC61000-4-4 (EFT) @5/50ns		40A
Peak Pulse Current(8/20µs)	I <sub>PP</sub>	80A
Peak Pulse Power (8/20µs)	P <sub>PK</sub>	1100W

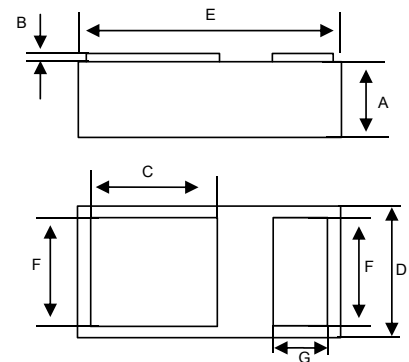
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

**Circuit and Pin Schematic**



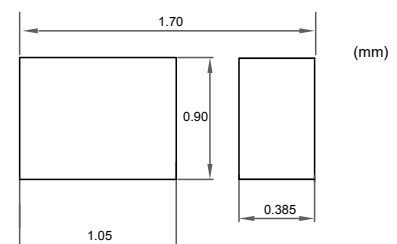
**ESD Protection Device**

**DFN1608-2L**



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.018	0.022	0.47	0.55	
B	0.000	0.002	0.00	0.05	
C	0.031	0.035	0.80	0.90	
D	0.030	0.033	0.75	0.85	
E	0.061	0.065	1.55	1.65	
F	0.022	0.026	0.55	0.65	
G	0.005	0.009	0.13	0.23	

**Suggested Solder Pad Layout**



**Electrical Characteristics @ 25°C (Unless Otherwise Specified)**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Working Voltage	$V_{RWM}$				5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$	6		9	V
Reverse Leakage Current	$I_R$	$V_{RWM}=5V$			1	$\mu A$
Forward Voltage	$V_F$	$I_F=10mA$			1.15	V
Clamping Voltage	$V_C$	$I_{PP}=10A, t_p=8/20\mu s$			11	V
Clamping Voltage	$V_C$	$I_{PP}=80A, t_p=8/20\mu s$			17.5	V
Junction Capacitance	$C_J$	$V_R = 0V, f = 1MHz$			800	pF

## Curve Characteristics

Fig. 1 - 8 X 20 $\mu$ s Pulse Waveform

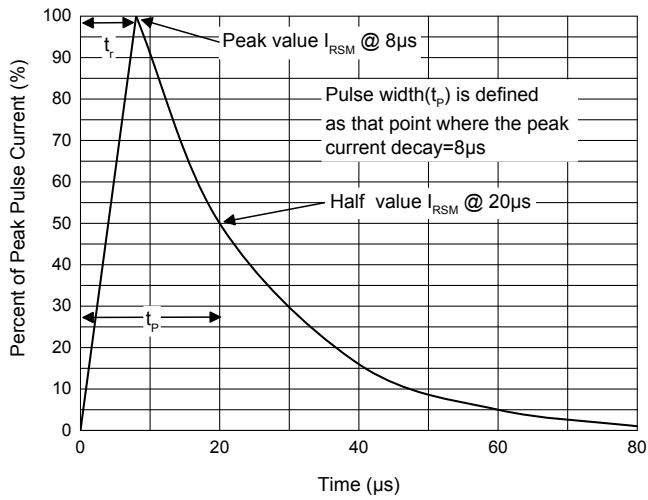


Fig. 2 - Non-Repetitive Peak Pulse Power

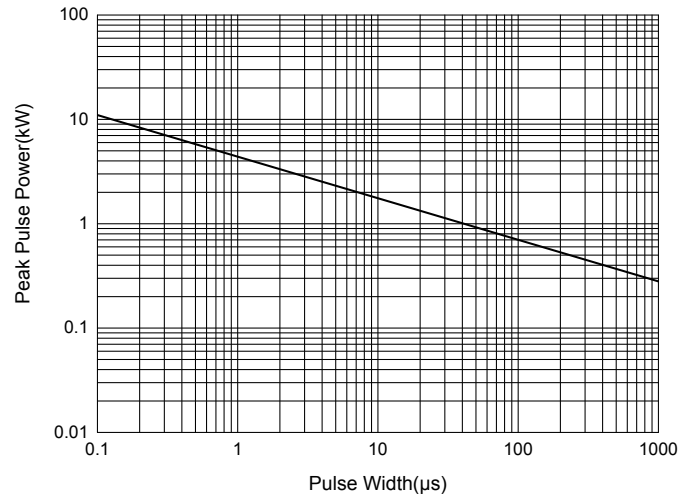


Fig. 3 - Clamping Voltage Characteristics

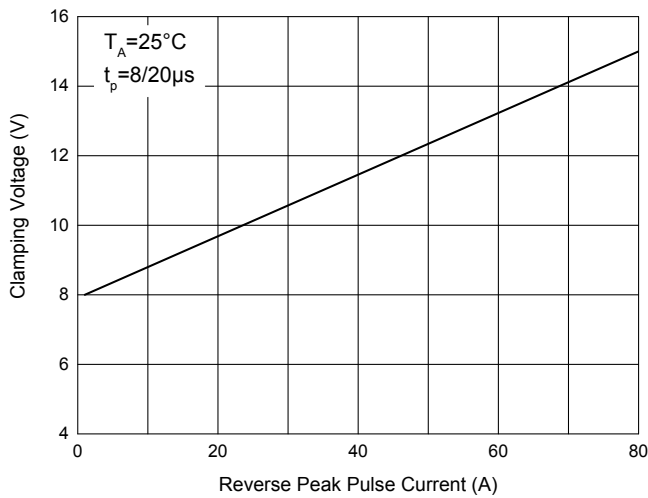
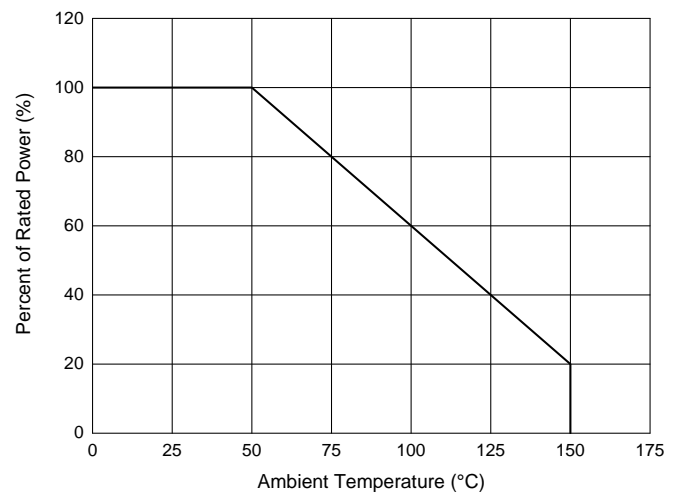


Fig. 4 - Pulse Derating Curve



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel

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