

Features

- Low 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
ESDSL5V0L2B	5N or BV

IEC61000-4-2(ESD)	Air Contact	±20KV ±20KV
IEC61000-4-4 (EFT) @5/50ns		40A
Peak Pulse Current(8/20µs)	I _{PP}	3A
Peak Pulse Power (8/20µs)	P _{PK}	40W

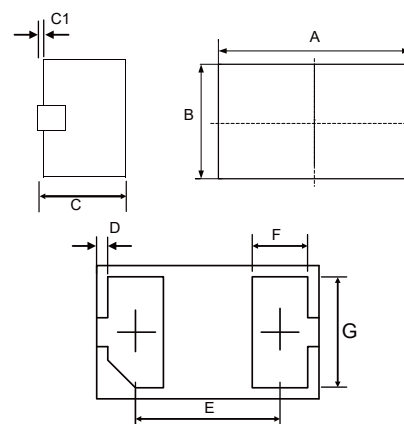
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Internal Structure



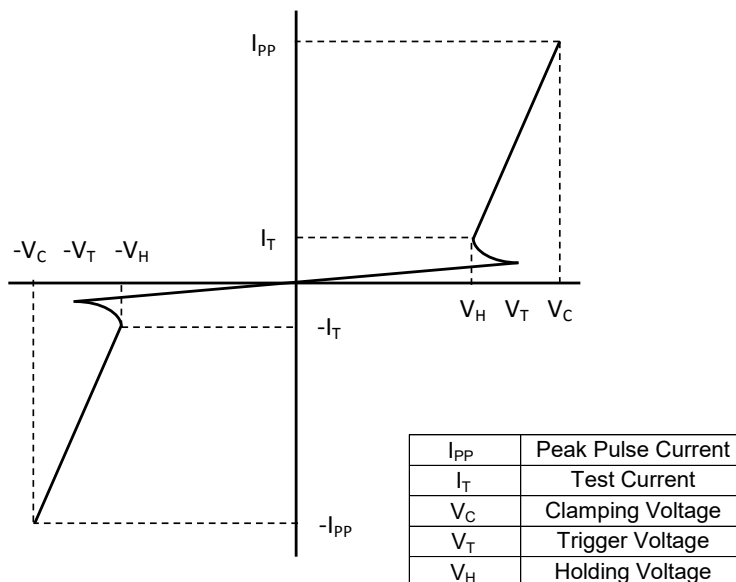
ESD Protection Device

DFN1006-2L



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.037	0.041	0.95	1.05	
B	0.022	0.026	0.55	0.65	
C	0.016	0.020	0.40	0.50	
C1	-----	0.002	-----	0.05	
D	0.001	0.003	0.02	0.08	
E	0.026		0.65		TYP.
F	0.008	0.012	0.20	0.30	
G	0.018	0.022	0.45	0.55	

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)



Electrical Characteristics @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Working Voltage	V_{RWM}				5.5	V
Trigger Voltage	V_{TRIG}	High Voltage than V_{TRIG} Guarantees the Protection Turn-On	6.5			V
Holding Voltage	V_H	$I_H=1\text{mA}$, Lower Voltage than V_{TRIG} Guarantees the Protection Turn-Off	6.1	7	8.8	V
Reverse Leakage Current	I_R	$V_{RWM} = 5.5\text{V}$			50	nA
Clamping Voltage	V_C	$I_{PP}=1\text{A}$, $t_p=8/20\mu\text{s}$			13	V
Clamping Voltage	V_C	$I_{PP}=3\text{A}$, $t_p=8/20\mu\text{s}$			15	V
Junction Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$		0.15	0.2	pF

Curve Characteristics

Fig. 1 - 8 X 20µs Pulse Waveform

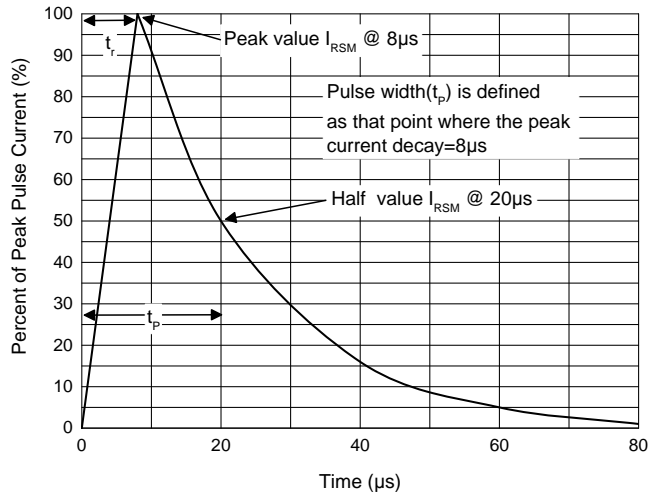


Fig. 2 - Non-Repetitive Peak Pulse Power

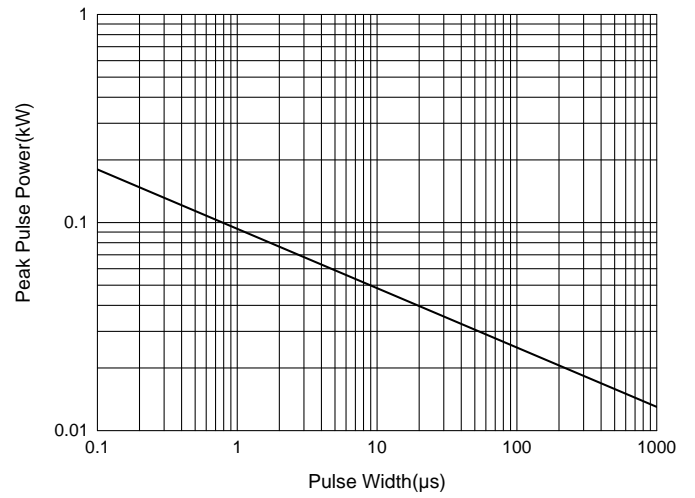


Fig. 3 - Power Derating Curve

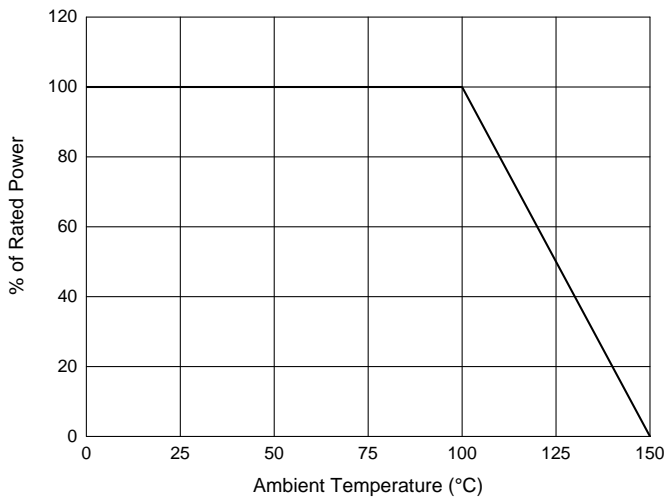


Fig. 4 - Clamping Voltage Characteristics

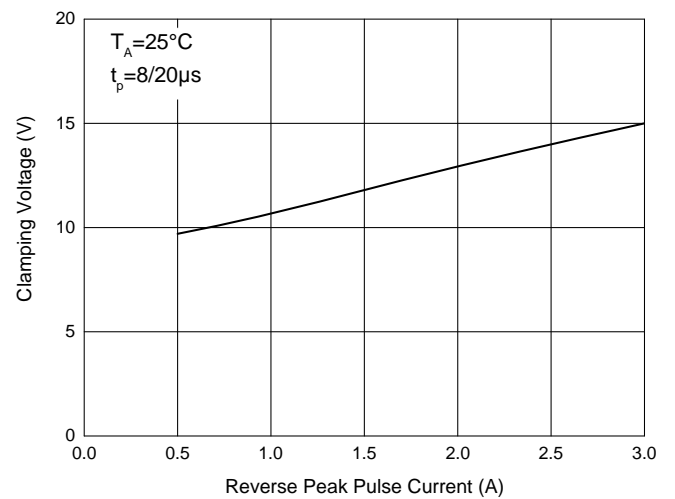
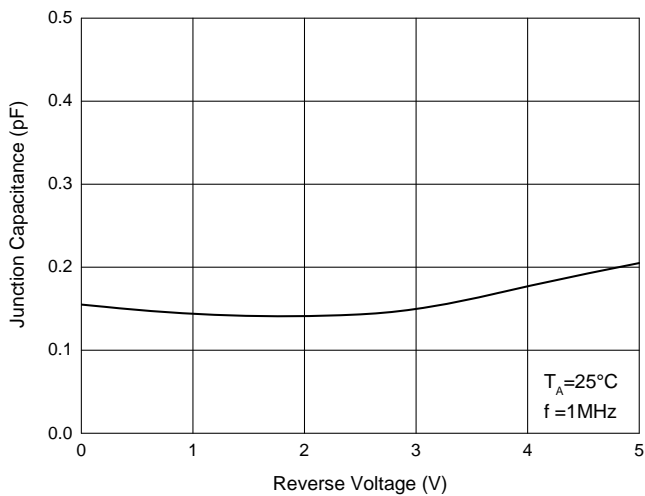


Fig. 5 - Capacitance Characteristics



Ordering Information

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

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