NEW PRODUCT

Features

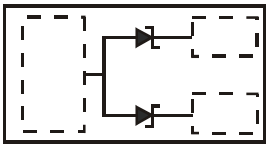
- IEC 61000-4-2 (ESD): Level 4, Air – 16kV, Contact – 8kV
- MIL STD 883C (ESD) HBM – 16kV
- Low Leakage < 1μA @ 5.25 Volts
- Low Capacitance (40pF typical)
- Surface Mount Package Ideally Suited for Automated Insertion
- **Lead, Halogen and Antimony Free, RoHS Compliant (Note 1)**
- **"Green" Device (Note 2)**

Mechanical Data

- Case: DFN1006-3
- Case Material: Molded Plastic, "Green" Molding Compound. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Finish — NiPdAu over Copper leadframe. Solderable per MIL-STD-202, Method 208
- Weight: 0.0009 grams (Approximate)

DFN1006-3

Bottom View



Top View
Internal Schematic

Ordering Information (Note 3)

Part Number	Case	Packaging
DESD6V8DLP-7	DFN1006-3	3000/Tape & Reel
DESD6V8DLP-7B	DFN1006-3	10,000/Tape & Reel

Notes: 1. No purposefully added lead.
2. Diodes Inc.'s "Green" policy can be found on our website at http://www.diodes.com.
3. For packaging details, go to our website at http://www.diodes.com.

Marking Information

DESD6V8DLP-7

Dot Denotes
Anode Side

DESD6V8DLP-7B

Bar Denotes
Cathode Side

9Z = Product Type Marking Code

NEW PRODUCT

Maximum Ratings @T_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Forward Voltage @ I_F = 10mA	V_F	1.25	V

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Peak Pulse Power (tp = 8x20μs) (Note 4) T_A = 25°C	P_{pk}	70	W
Power Dissipation (Note 4)	P_D	385	mW
Thermal Resistance Junction to Ambient (Note 4) T_A = 25°C	$R_{\theta JA}$	325	°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150	°C

Electrical Characteristics @T_A = 25°C unless otherwise specified

Reverse Standoff Voltage	Breakdown Voltage V_{BR} @ I_T			Test Current	Max. Reverse Leakage @ V_{RWM} (Note 5)	Maximum Dynamic Impedance f = 1kHz			Typical Total Capacitance C_T V_R = 0V, f = 1MHz
V_{RWM} (V)	Min (V)	Typ (V)	Max (V)	I_T (mA)	I_R (μA)	Z_{ZT} @ I_T (Ω)	Z_{ZK} @ I_{ZK} (Ω)	I_{ZK} (mA)	(pF)
5.25	6.4	6.8	7.2	5.0	1.0	30	300	0.5	40

Notes: 4. Device mounted on FR-5 PC board of size 1.0 x 0.75 x 0.62 inches.
5. Short duration pulse test used to minimize self-heating effect.
6. Clamping voltage value is based on an 8x20 μs peak pulse current (I_{pp}) waveform.

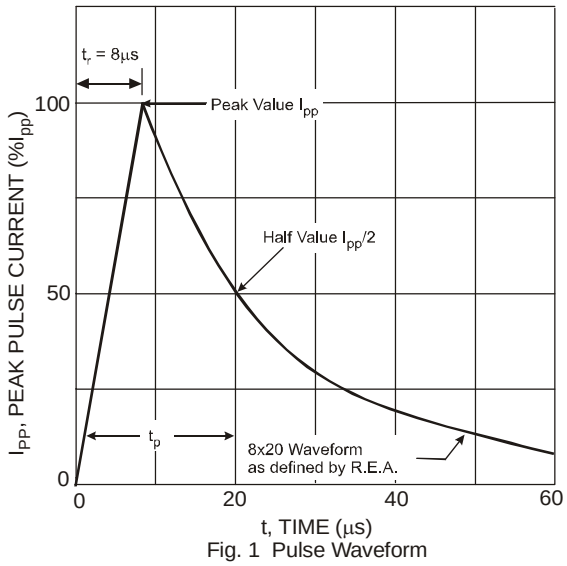


Fig. 1 Pulse Waveform

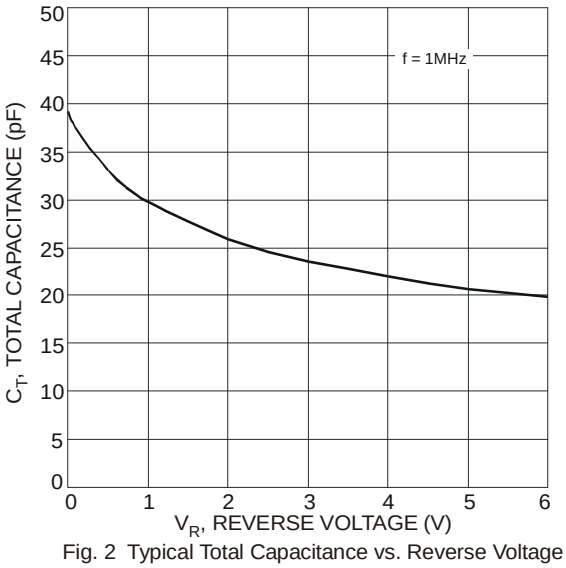


Fig. 2 Typical Total Capacitance vs. Reverse Voltage

NEW PRODUCT

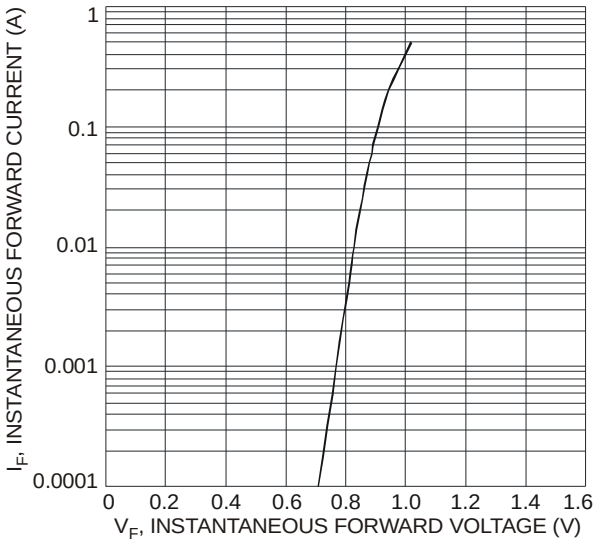


Fig. 3 Typical Forward Characteristics, Per Element

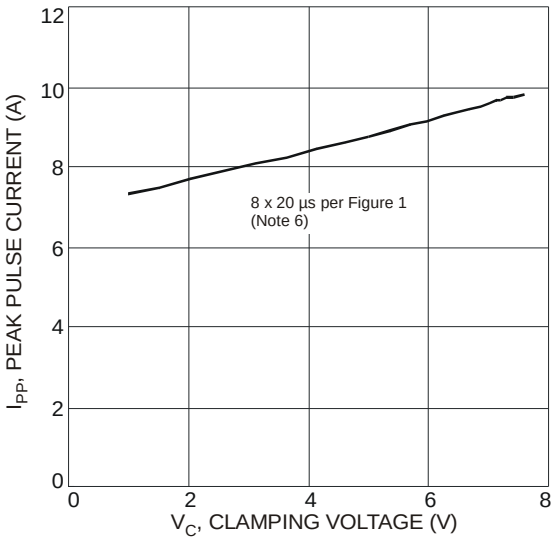
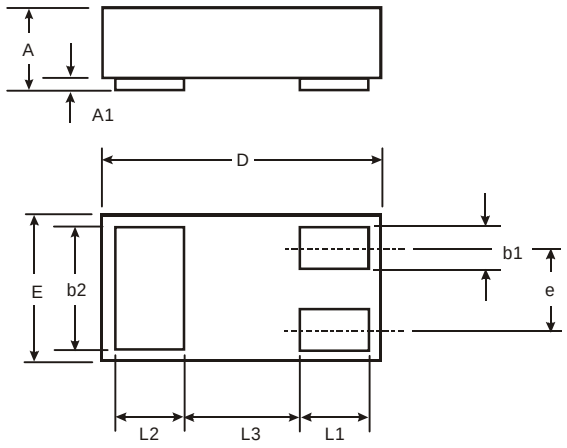


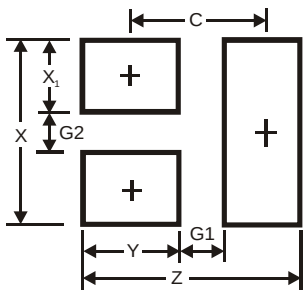
Fig. 4 Clamping Voltage vs. Peak Pulse Current

Package Outline Dimensions



DFN1006-3			
Dim	**Min**	**Max**	**Typ**
A	0.47	0.53	0.50
A1	0	0.05	0.03
b1	0.10	0.20	0.15
b2	0.45	0.55	0.50
D	0.95	1.075	1.00
E	0.55	0.675	0.60
e	—	—	0.35
L1	0.20	0.30	0.25
L2	0.20	0.30	0.25
L3	—	—	0.40
All Dimensions in mm			

Suggested Pad Layout



Dimensions	Value (in mm)
Z	1.1
G1	0.3
G2	0.2
X	0.7
X1	0.25
Y	0.4
C	0.7

NEW PRODUCT

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http://moschip.ru/get-element

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