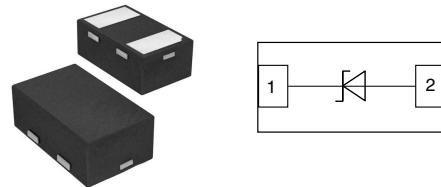


ESD Protection Diode in DFN1006

Features

- 400Watts peak pulse power ($T_p = 8/20\mu s$)
- DFN1006 package
- Uni-directional configurations
- Low clamping voltage
- Low leakage current
- Normal capacitance ($C_j = 140pF$ typ.)
- Protection one data/power line to:
 - IEC 61000-4-2 $\pm 30kV$ contact $\pm 30kV$ air
 - IEC 61000-4-4 (EFT) 40A (5/50ns)
 - IEC 61000-4-5 (Lightning) 28A (8/20 μs)



Mechanical Data

- **Case:** DFN1006 (plastic package).
Lead free; RoHS compliant; Halogen free
- **Molding Compound Flammability Rating:**
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals

Applications

- Microprocessor based equipment
- Personal Digital Assistants (PDAs)
- Notebooks & Handhelds
- Portable Instrumentation
- Digital Cameras
- Portable Instrumentation

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

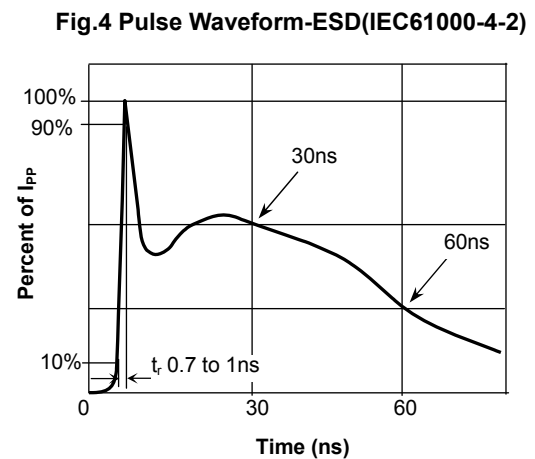
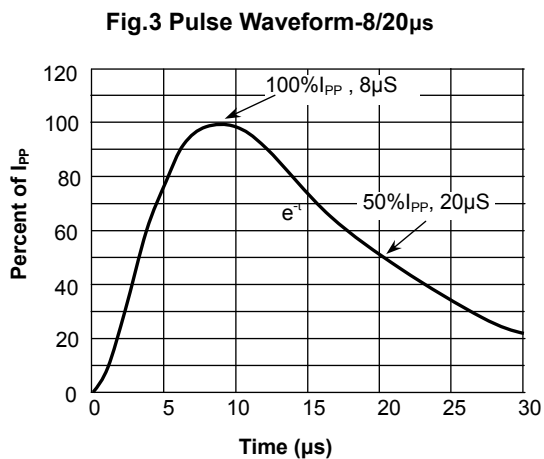
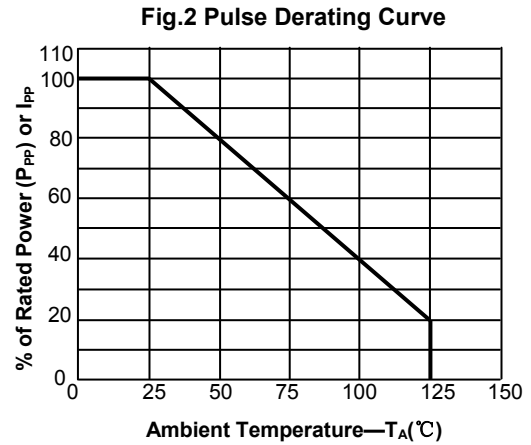
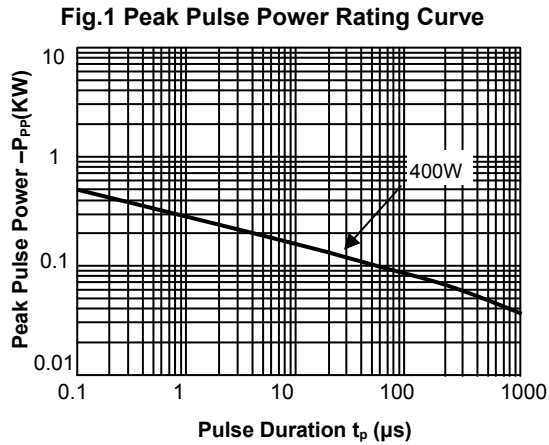
Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_p = 8/20\mu s$)	P_{PP}	400	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	30/30	kV
Peak Pulse Current ($t_p = 8/20\mu s$)	I_{PP}	28	A
Junction Temperature	T_J	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics

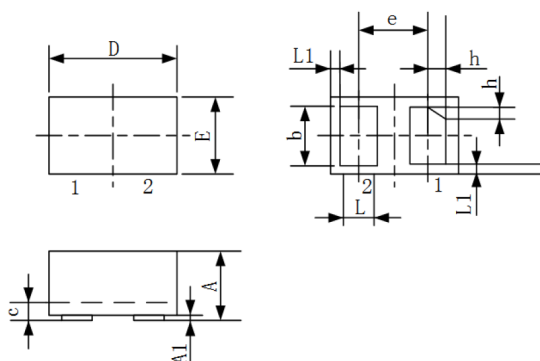
($T_A = 25$ °C unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}				7.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T = 1mA$	8.0			V
Reverse Leakage Current	I_R	$V_{RWM} = 7.0V$			0.5	uA
Clamping Voltage (IEC 61000-4-5)	V_C	$I_{PP} = 28A$			15.0	V
Junction Capacitance	C_J	$V_R = 0V, f = 1MHz$		140		pF

Typical Characteristics ($T_{amb} = 25^{\circ}\text{C}$ unless otherwise specified)

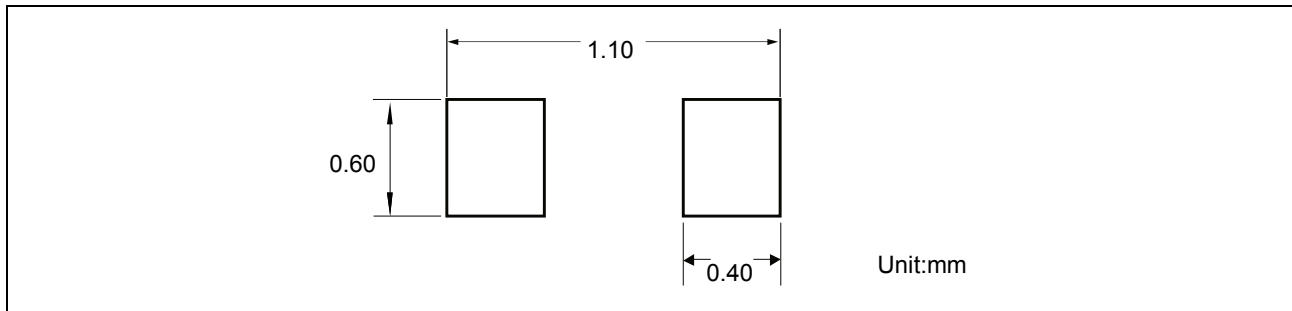


Package Dimensions

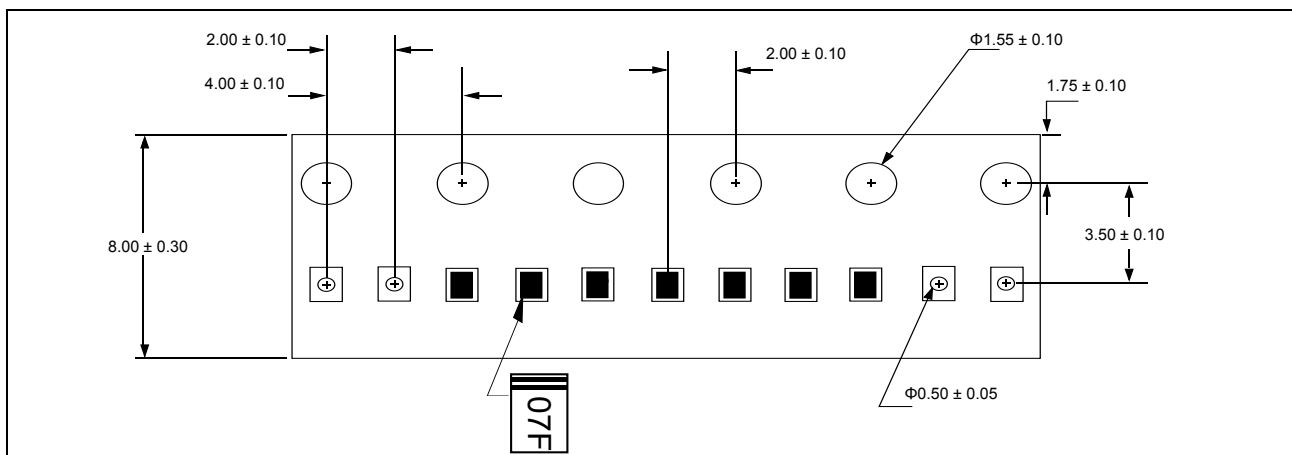


Symbol	Dimensions in millimeters		
	Min	Nom	Max
D	0.95	1.00	1.05
E	0.55	0.60	0.65
b	0.45	0.50	0.55
L	0.20	0.25	0.30
e	0.65 BSC		
A	0.40	0.50	0.55
A1	0	0.02	0.05
c	0.12	0.15	0.18
h	0.07	0.12	0.17
L1	0.05 REF		

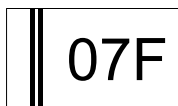
Pad Dimensions



Tape and Reel Specification



Marking



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
TESD1006HC7VU	DFN1006	Tape and reel	10000pcs / reel	EIA STD RS-481