

ESDU0501HP

Transient Voltage Suppressors

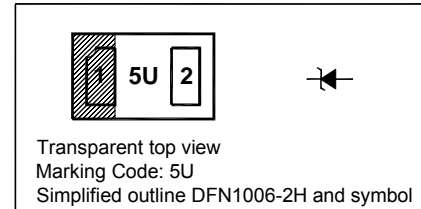
for ESD Protection

Features

- Protects one data line
- Low leakage current
- Low clamping voltage

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

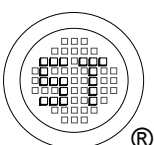


Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Pulse Current ($t_p = 8/20 \mu\text{s}$)	I_{PP}	2	A
IEC61000-4-2 (ESD) Air Contact	V_{PP}	± 20 ± 15	KV
Peak Pulse Power ($t_p = 8/20 \mu\text{s}$)	P_{PK}	25	W
Operation Temperature Range	T_j	- 55 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Stand-Off Voltage	V_{RWM}	-	5	V
Reverse Breakdown Voltage at $I_R = 1 \text{ mA}$	$V_{(BR)R}$	6	-	V
Forward Voltage at $I_F = 10 \text{ mA}$	V_F	-	1.2	V
Reverse Current at $V_{RWM} = 5 \text{ V}$	I_R	-	0.25	μA
Clamping Voltage at $I_{PP} = 2 \text{ A}$, $t_p = 8/20 \mu\text{s}$	V_C	-	12.5	V
Junction Capacitance at $V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$	C_j	-	10	pF

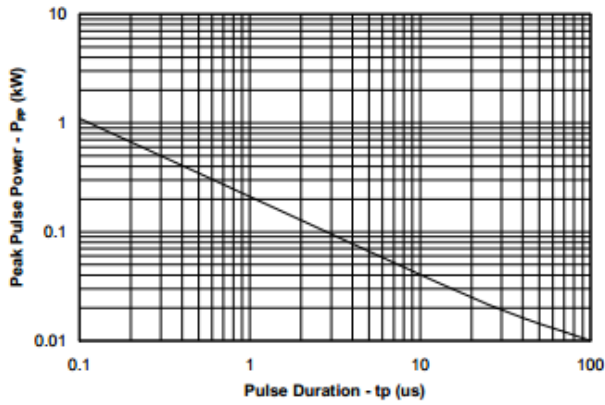


SEMTECH ELECTRONICS LTD.
Subsidiary of Sino-Tech International (BVI) Limited

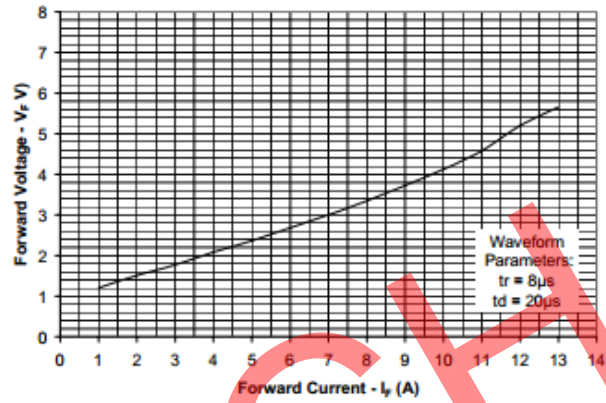


Dated: 16/05/2013 Rev: 01

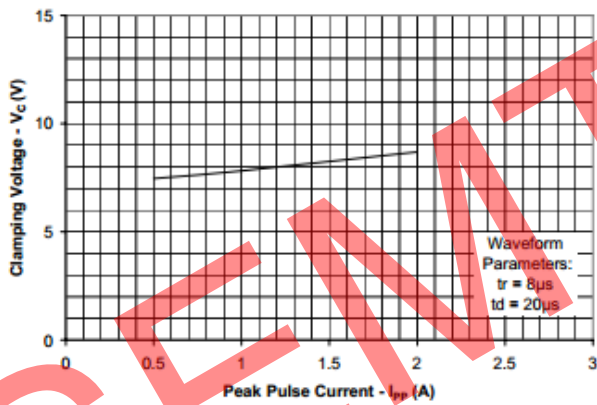
Non-Repetitive Peak Pulse Power vs. Pulse Time



Forward Voltage vs. Forward Current



Clamping Voltage vs. Peak Pulse Current

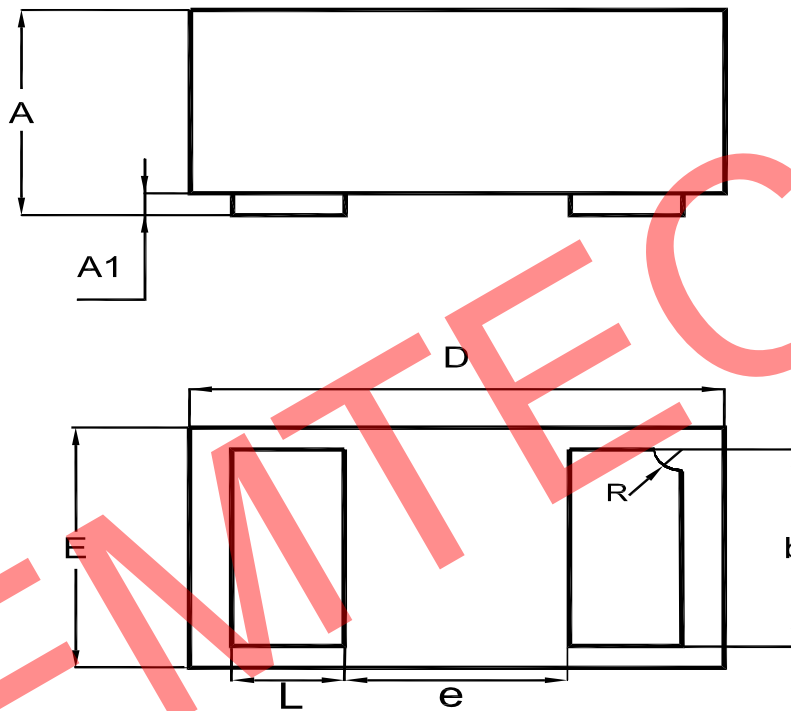


ESDU0501HP

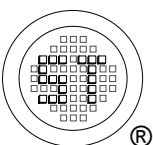
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

DFN1006-2H



UNIT	A	A1	b	D	E	e	L	R
mm	0.51	0.05	0.55	1.075	0.675	0.4	0.3	0.15
	0.46	0	0.45	0.95	0.55		0.2	0.05



SEMTECH ELECTRONICS LTD.
Subsidiary of Sino-Tech International (BVI) Limited



Dated: 16/05/2013 Rev: 01