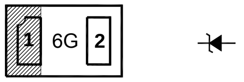
ESDU6V8HP

Transient Voltage Suppressors

for ESD Protection

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Transparent top view
Marking Code: 6G
Simplified outline DFN1006-2H and symbol

Features

- •Ultra-Small Leadless Surface Mount Package

Absolute Maximum Ratings (T_a = 25℃)

Parameter	Symbol	Value	Unit
Peak Pulse Power (tp = 8/20 μs) [1]	P_{PK}	85	W
Peak Pulse Current (tp = 8/20 μs) [1]	I_{PP}	4.5	A
IEC61000-4-2 (ESD) Air Contact	V_{ESD}	25 8	KV
Operating Junction and Storage Temperature Range	T_j, T_{stg}	- 65 to + 150	℃

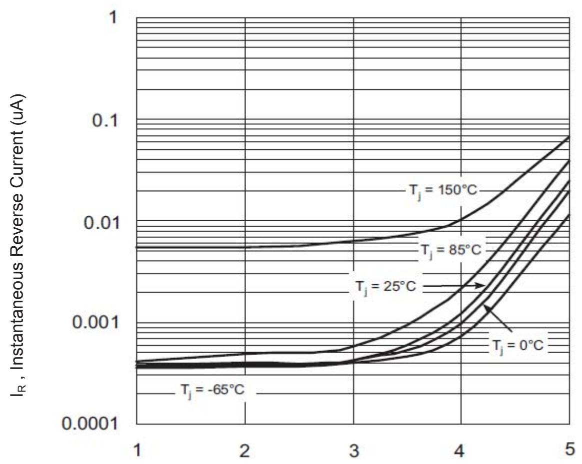
Thermal Characteristics (T_a = 25℃)

Parameter	Symbol	Value	Unit
Power Dissipation [1]	P_D	250	mW
Thermal Resistance from Juntion to Ambient [1]	$R_{\theta JA}$	500	℃/W

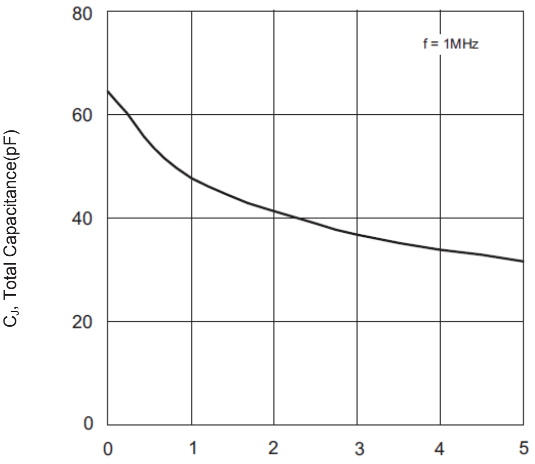
[1] Part mounted on FR-4 PC board with recommended pad layout.

Characteristics at (T_a = 25℃)

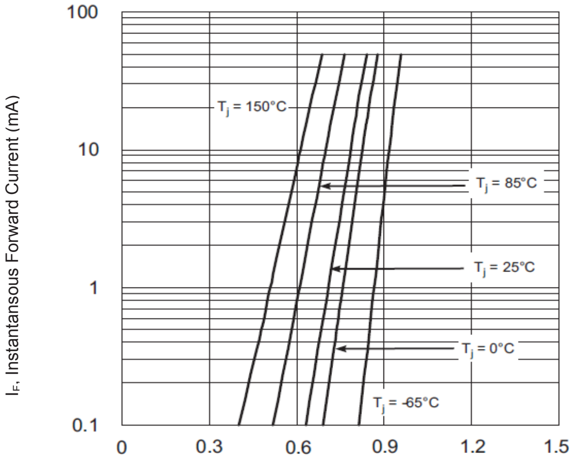
Parameter	Symbol	Min.	Max.	Unit
Reverse Stand-Off Voltage	V_{RWM}	-	5	V
Reverse Breakdown Voltage at I_T = 5 mA	V_{BR}	6.4	7.2	V
Forward Voltage at I_F = 10 mA	V_F	-	0.9	V
Reverse Current at V_{RWM} = 5 V	I_R	-	0.5	μA
Clamping Voltage at I_{PP} = 4.5 A, tp = 8/20 μs	V_C	-	19	V
Junction Capacitance at V_R = 0 V, f = 1 MHz	C_j	-	65	pF



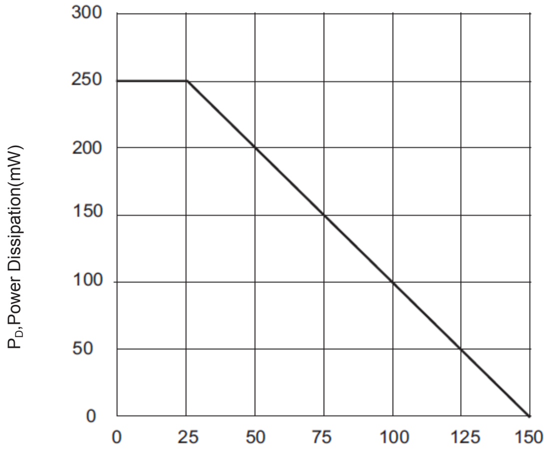
V$_R$, Instantaneous Reverse Voltage (V)
Figure. 1 Typical Reverse Characteristics



V$_R$, Reverse Voltage (V)
Figure. 2 Typical Total Capacitance



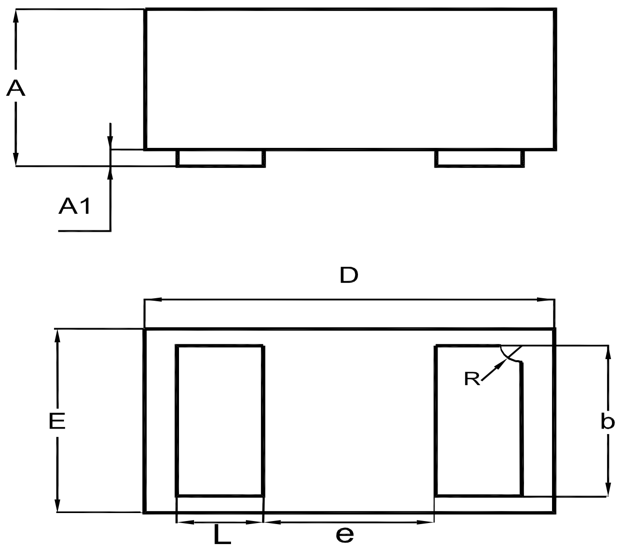
V$_F$, Instantaneous Forward Voltage(V)
Figure. 3 Typical Forward Characteristics



T$_A$, Ambient Temperature (°C)
Figure.4 Power Derating Curve

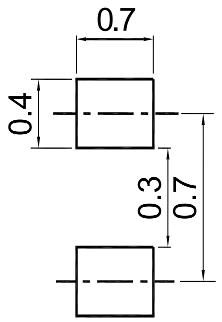
PACKAGE OUTLINE

Plastic surface mounted package **DFN1006-2H**



UNIT	A	A1	b	D	E	e	L	R
mm	0.51 0.46	0.05 0	0.55 0.45	1.05 0.95	0.65 0.55	0.4	0.3 0.2	0.15 0.05

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
DFN1006-2H	8	4 ± 0.1	0.157 ± 0.004	178	7	5,000