

ESDU2271GP

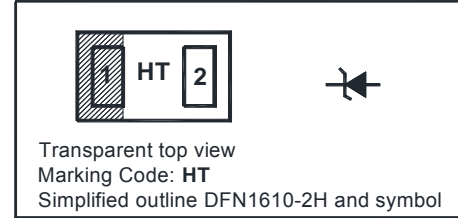
ESD Protection Diode

Features

- Low leakage current

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



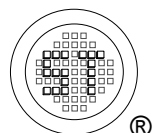
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Pulse Power ($t_p = 8/20 \mu\text{s}$)	P_{PK}	1375	W
Peak Pulse Current ($t_p = 8/20 \mu\text{s}$)	I_{PP}	25	A
IEC61000-4-2 (ESD) Air Contact	V_{ESD}	± 30 ± 30	KV
Operation Temperature Range	T_j	- 40 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.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	V_{RWM}	-	-	22	V
Reverse Breakdown Voltage at $I_R = 1 \text{ mA}$	$V_{(BR)R}$	25.5	-	33.5	V
Reverse Current at $V_{RWM} = 22 \text{ V}$	I_R	-	-	100	nA
Clamping Voltage at $I_{PP} = 10 \text{ A}$, $t_p = 8/20 \mu\text{s}$ at $I_{PP} = 25 \text{ A}$, $t_p = 8/20 \mu\text{s}$	V_C	-	-	40 55	V
ESD Clamping Voltage at $I_{TLP} = 4 \text{ A}$, $t_p = 0.2/100 \text{ ns}$ at $I_{TLP} = 16 \text{ A}$, $t_p = 0.2/100 \text{ ns}$	V_{CL}	-	30.5 32	-	V
Junction Capacitance at $V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$	C_j	-	-	220	pF
Dynamic Resistance ¹⁾	R_{dyn}	-	0.13	-	Ω

¹⁾ Dynamic Resistance calculated from $I_{TLP} = 4 \text{ A}$ to $I_{TLP} = 16 \text{ A}$.



Electrical characteristic curves

Fig 1. Pulse Waveform

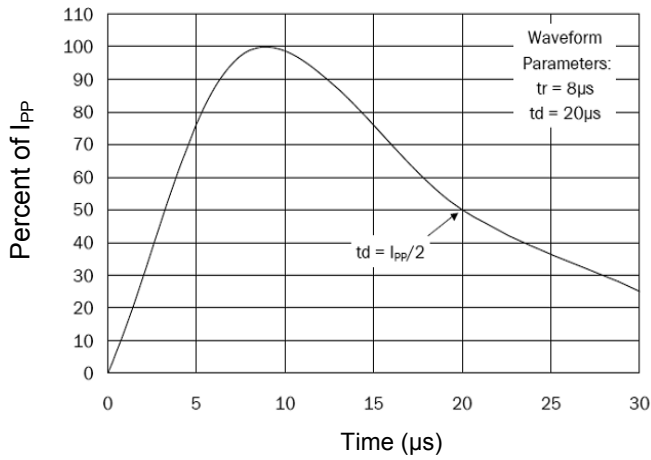


Fig 2. Power Derating Curve

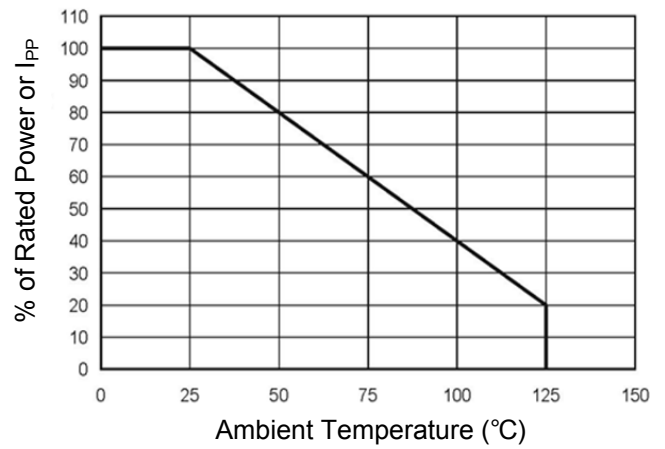


Fig 3. Clamping Voltage Curve

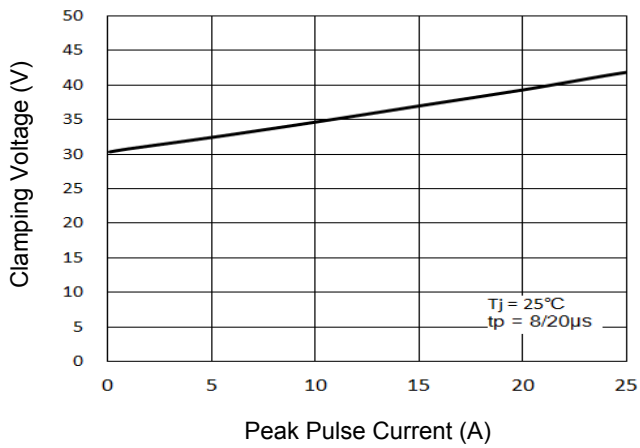


Fig 4. Junction Capacitance

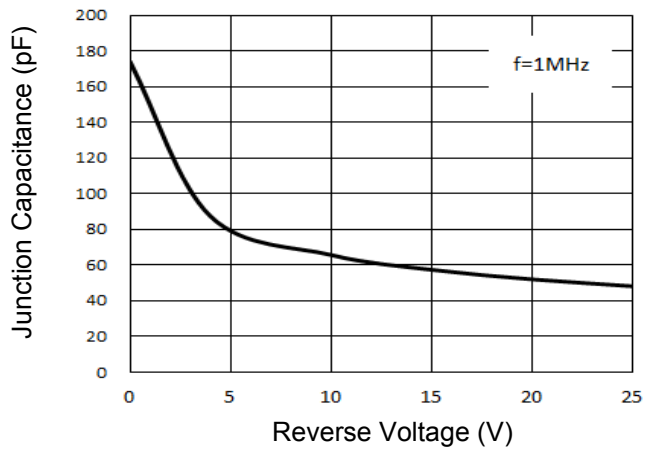
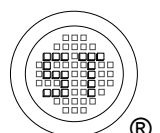
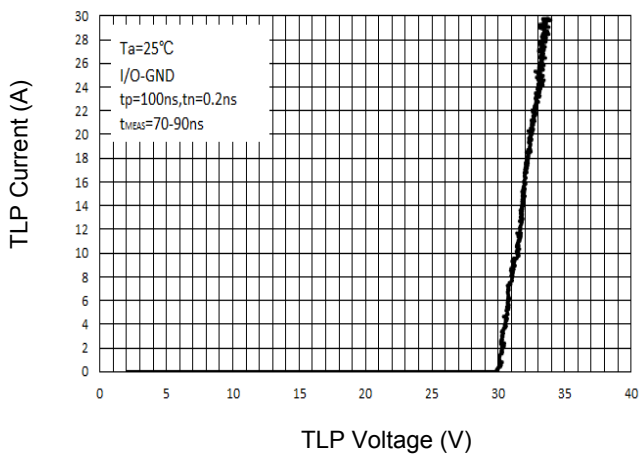


Fig 5. TLP Curve

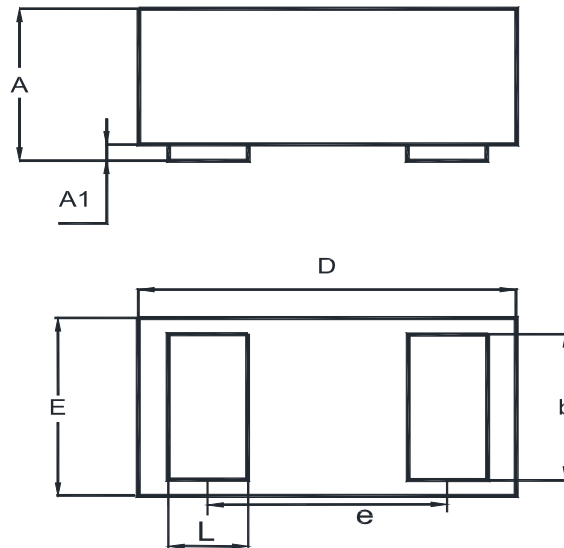


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PACKAGE OUTLINE

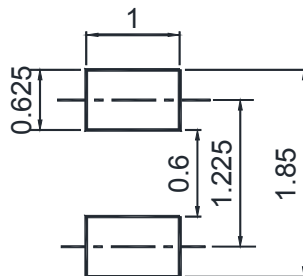
Plastic surface mounted package

DFN1610-2H



UNIT	A	A1	b	D	E	e	L
mm	0.55	0.05	0.95	1.65	1.05	1.1	0.45
	0.45	0	0.85	1.55	0.95		0.35

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
DFN1610-2H	8	2 ± 0.1	0.079 ± 0.004	178	7	10,000

Marking information

" HT " = Part No.

Font type: Arial

