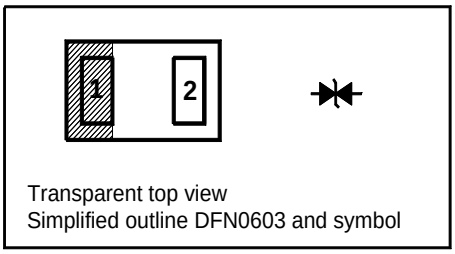
ESDBL0521Z-AH

ESD Protection Diode

PINNING

PIN	DESCRIPTION
1	Anode
2	Anode



Transparent top view
Simplified outline DFN0603 and symbol

Features

- AEC-Q101 Qualified
- Low reverse current
- Low capacitance
- Halogen and Antimony Free(HAF), RoHS compliant

Absolute Maximum Ratings (T_a = 25℃ unless otherwise specified)

Parameter		Symbol	Value	Unit
Peak Pulse Power (tp = 8/20 µs)		P_{PK}	100	W
Peak Pulse Current (tp = 8/20 µs)		I_{PP}	4	A
ESD (IEC61000-4-2)	Air Contact	V_{ESD}	± 25 ± 17	KV
Operating Junction Temperature Range		T_j	- 55 to + 125	℃
Storage Temperature Range		T_{stg}	- 55 to + 150	℃

Characteristics at T_a = 25℃

Parameter	Symbol	Min.	Max.	Unit
Reverse Stand-Off Voltage	V_{RWM}	-	5	V
Reverse Breakdown Voltage at I_R = 1 mA	$V_{(BR)R}$	6	11	V
Reverse Current at V_{RWM} = 5 V	I_R	-	100	nA
Clamping Voltage at I_{PP} = 1 A, tp = 8/20 µs at I_{PP} = 4 A, tp = 8/20 µs	V_C	- -	15 25	V
Junction Capacitance at V_R = 0 V, f = 1 MHz	C_j	-	0.5	pF

Preliminary
Dated: 30/10/2024 P1

Electrical Characteristic Curves

Fig 1. Pulse Waveform

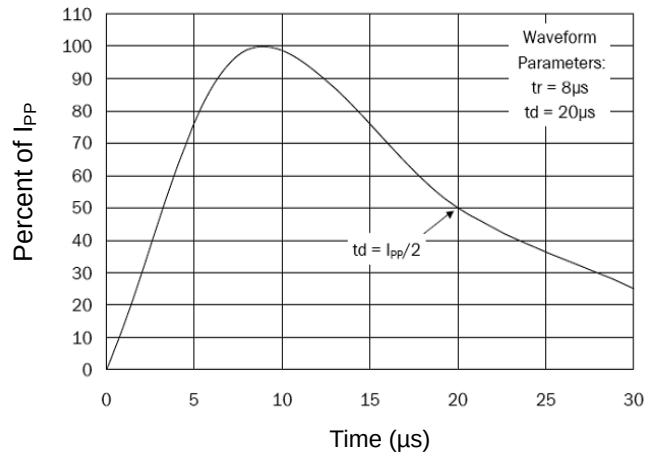


Fig 2. Power Derating Curve

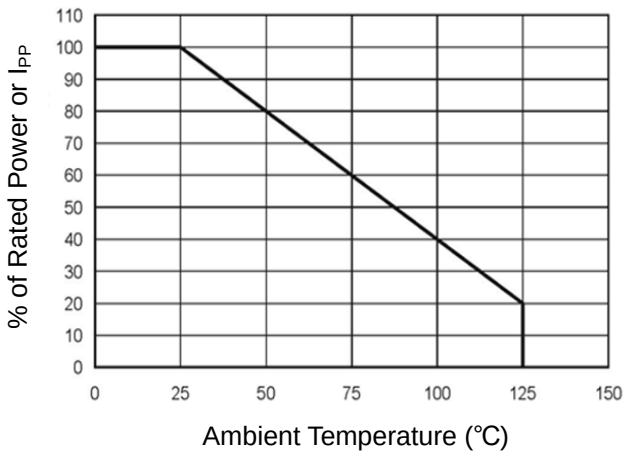


Fig 3. Clamping Voltage Curve

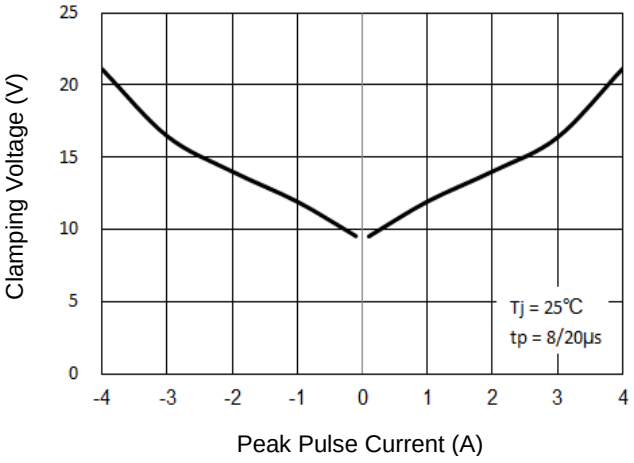


Fig 4. Junction Capacitance

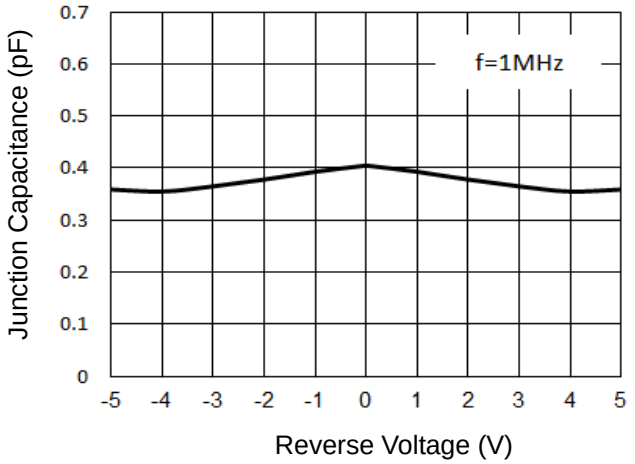
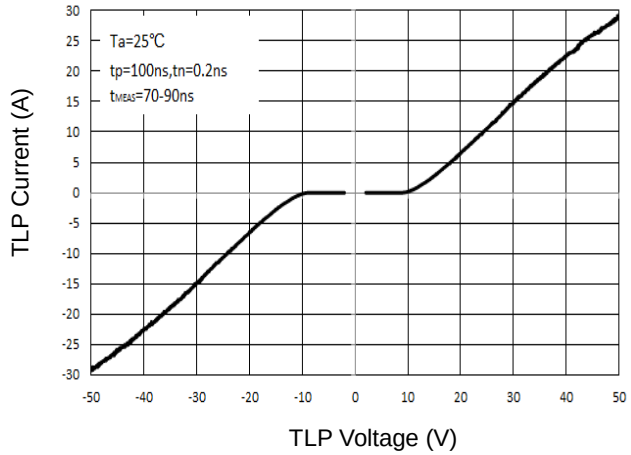
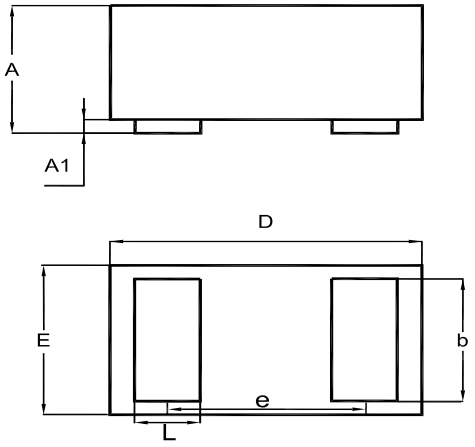


Fig. 5 TLP Curve



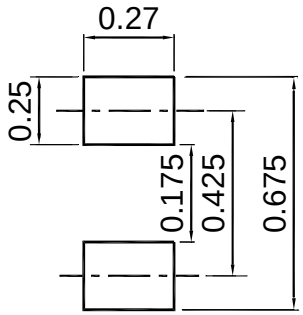
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads **DFN0603**



UNIT	A	A1	b	D	E	e	L
mm	0.27 0.33	0 0.025	0.21 0.29	0.57 0.65	0.28 0.35	0.355	0.14 0.22

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
DFN0603	8	2 ± 0.1	0.079 ± 0.004	178	7	10,000

Marking information

" 1C " = Part No.
" II " = Marking Line
Font type: Arial