

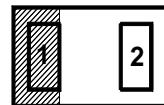
ESD Protection Diode

Features

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

PINNING

PIN	DESCRIPTION
1	Anode
2	Anode



Transparent top view
Simplified outline DFN0603 and symbol

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

Parameter	Symbol	Value	Unit
Peak Pulse Power ($tp = 8/20 \mu\text{s}$)	P_{PK}	100	W
Peak Pulse Current ($tp = 8/20 \mu\text{s}$)	I_{PP}	4	A
ESD (IEC61000-4-2)	V_{ESD}	± 25 ± 17	kV
Operating Junction Temperature Range	T_j	- 55 to + 125	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°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	11	V
Reverse Current at $V_{RWM} = 5 \text{ V}$	I_R	-	100	nA
Clamping Voltage at $I_{PP} = 1 \text{ A}$, $tp = 8/20 \mu\text{s}$ at $I_{PP} = 4 \text{ A}$, $tp = 8/20 \mu\text{s}$	V_C	- -	15 25	V
Junction Capacitance at $V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$	C_j	-	0.5	pF

ESDBL0521Z-AH

Electrical Characteristic Curves

Fig 1. Pulse Waveform

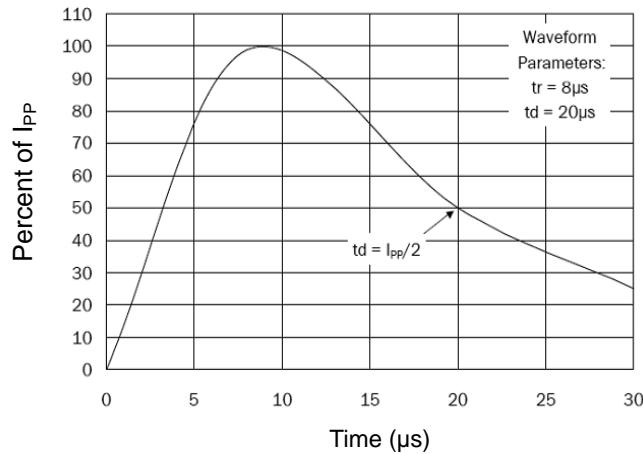


Fig 2. Power Derating Curve

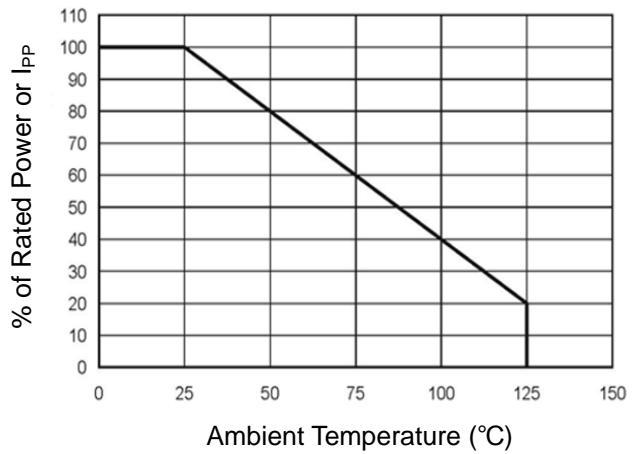


Fig 3. Clamping Voltage Curve

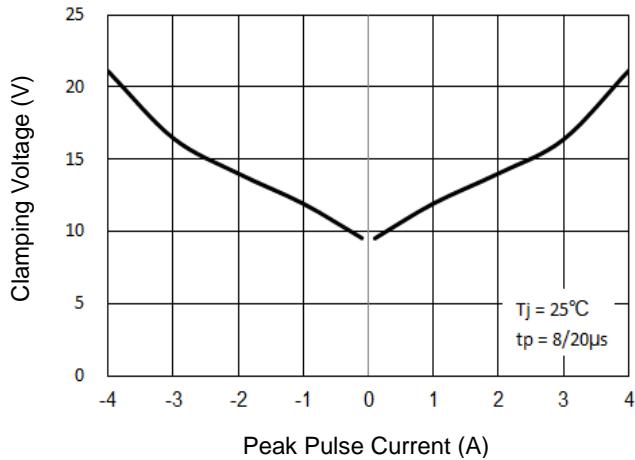


Fig 4. Junction Capacitance

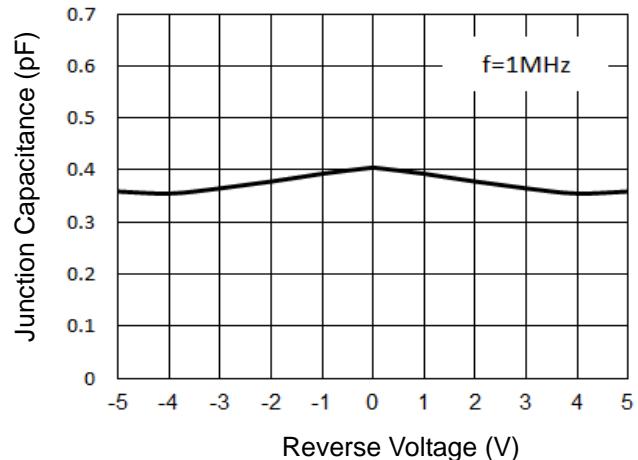
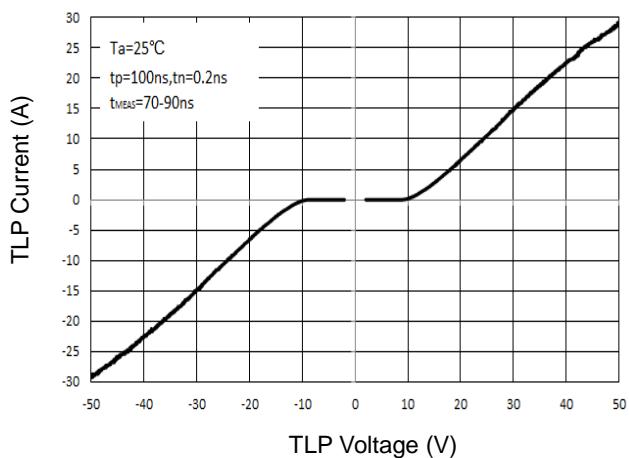
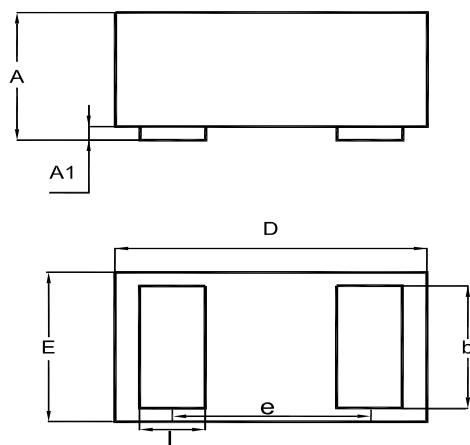
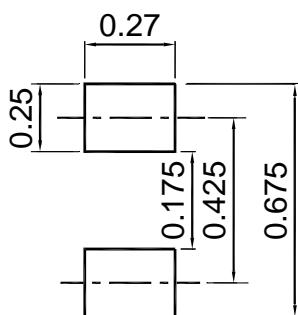


Fig. 5 TLP Curve



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

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

Recommended Soldering Footprint**Packing information**

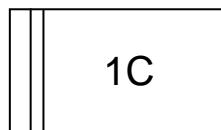
Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
DFN0603	8	2 ± 0.1	0.079 ± 0.004	178	7	10,000

Marking information

" 1C " = Part No.

" II " = Marking Line

Font type: Arial



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