

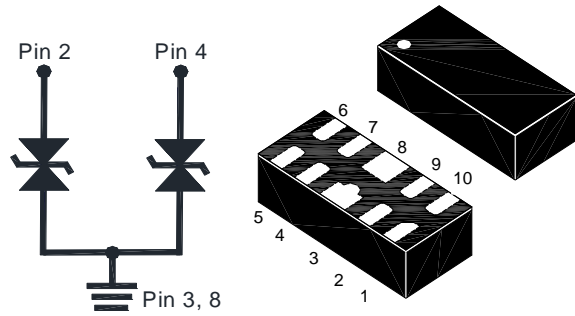
# ESDLC0531MP-2-HAF

## Transient Voltage Suppressors

for ESD protection

### Features

- Low clamping Voltage
- Low operating voltage
- Bi-direction high reliability
- Halogen and Antimony Free(HAF), RoHS compliant



1. NC 2. I/O1 3. GND 4. I/O2 5. NC  
 6. NC 7. NC 8. GND 9. NC 10. NC  
 Marking Code: "531."  
 DFN2510-10 Plastic package

### Absolute Maximum Ratings (T<sub>a</sub> = 25°C)

Parameter	Symbol	Value	Unit
IEC61000-4-2 (ESD) Air Contact	V <sub>ESD</sub>	± 20 ± 12	KV
Peak Pulse Current (tp = 8/20 μs)	I <sub>PP</sub>	4	A
Peak Pulse Power (tp = 8/20 μs)	P <sub>PK</sub>	80	W
Junction Temperature Range	T <sub>j</sub>	- 55 to + 125	°C
Storage Temperature Range	T <sub>stg</sub>	- 55 to + 150	°C

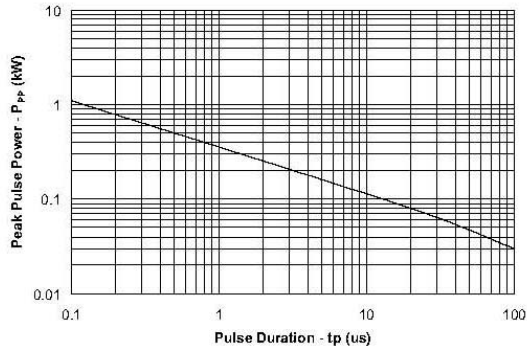
### Characteristics at T<sub>a</sub> = 25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage	V <sub>RWM</sub>	-	-	5	V
Reverse Breakdown Voltage at I <sub>R</sub> = 1 mA	V <sub>(BR)R</sub>	6	-	11	V
Reverse Current at V <sub>R</sub> = 5 V	I <sub>R</sub>	-	-	0.1	μA
Clamping Voltage at I <sub>PP</sub> = 1 A, tp = 8/20 μs	V <sub>C</sub>	-	-	12	V
at I <sub>PP</sub> = 4 A, tp = 8/20 μs		-	-	20	
Capacitance between Terminals at V <sub>R</sub> = 0 V, f = 1 MHz	C <sub>J</sub>	-	-	0.8	pF

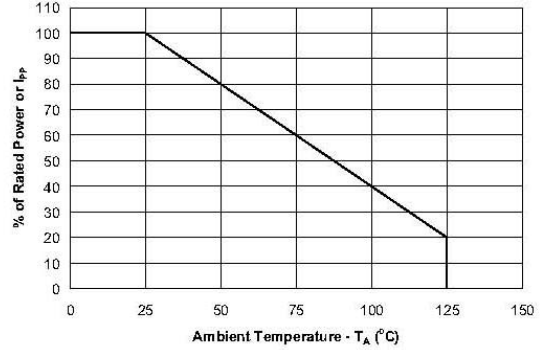
**TOP DYNAMIC**

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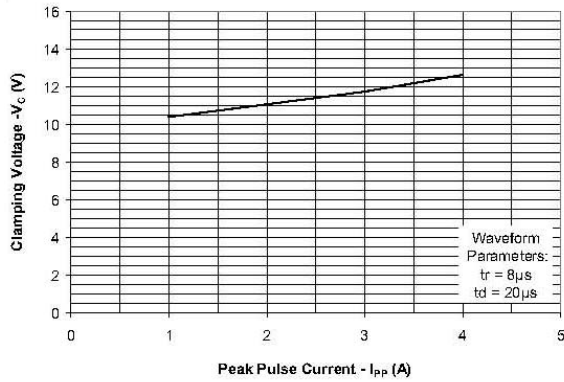
**Non-Repetitive Peak Pulse Power vs. Pulse Time**



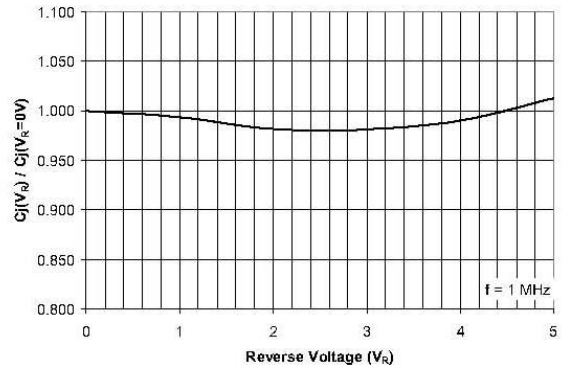
**Power Derating Curve**



**Clamping Voltage vs. Peak Pulse Current**



**Normalized Capacitance vs. Reverse Voltage**

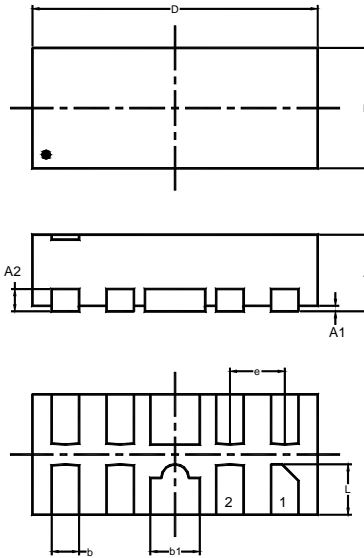


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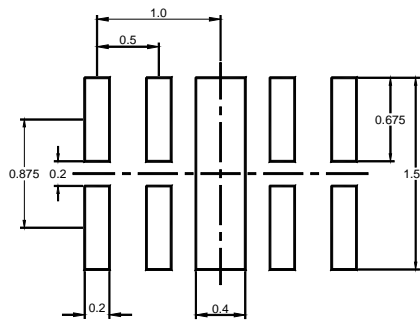
## Package Outline Dimensions (Units: mm)

DFN2510-10



UNIT	A	A1	A2	b	b1	D	E	e	L
mm	0.46	0	0.13	0.15	0.35	2.40	0.90	0.50	0.30
	0.51	0.05		0.25	0.45	2.60	1.10		0.425

## Recommended Soldering Footprint



## Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
DFN2510-10	8	4 ± 0.1	0.157 ± 0.004	178	7	4,000

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