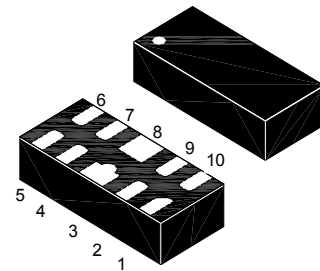
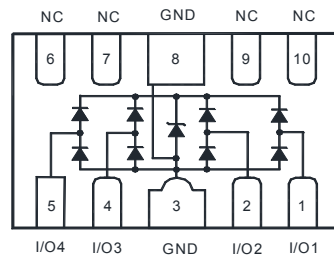


ESDLC8455MP-HAF

Transient Voltage Suppressors

Features

- Low Capacitance
- Halogen and Antimony Free(HAF), RoHS compliant



1. I/O1 2. I/O2 3. GND 4. I/O3 5. I/O4
 6. NC 7. NC 8. GND 9. NC 10. NC
 Marking Code: " D5 "
 DFN2510-10 Plastic package

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

Parameter	Symbol	Value	Unit
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	± 15 ± 15	KV
Operation Temperature Range	T_J	- 55 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 Working Voltage, I/O Pin to Gnd	V_{RWM}	-	-	3.3	V
Reverse Breakdown Voltage at $I_T = 1 \text{ mA}$, I/O Pin to Gnd	$V_{(\text{BR})\text{R}}$	5.5	-	-	V
Reverse Current at $V_{\text{RWM}} = 3.3 \text{ V}$, I/O Pin to Gnd	I_{R}	-	-	1	μA
Holding Reverse Voltage, I/O Pin to Gnd	V_{HOLD}	-	1.19	-	V
Holding Reverse Current, I/O Pin to Gnd	I_{HOLD}	-	25	-	mA
Clamping Voltage TLP IEC 61000-4-2 Level 2 equivalent ($\pm 4 \text{ kV}$ Contact, $\pm 4 \text{ kV}$ Air) at $I_{\text{PP}} = 8 \text{ A}$ at $I_{\text{PP}} = -8 \text{ A}$ IEC 61000-4-2 Level 4 equivalent ($\pm 8 \text{ kV}$ Contact, $\pm 15 \text{ kV}$ Air) at $I_{\text{PP}} = 16 \text{ A}$ at $I_{\text{PP}} = -16 \text{ A}$	V_{C}	- -	4.9 - 4.5	- -	V
Junction Capacitance at $V_{\text{R}} = 0 \text{ V}$, $f = 1 \text{ MHz}$, Between I/O Pins and Gnd at $V_{\text{R}} = 0 \text{ V}$, $f = 1 \text{ MHz}$, Between I/O Pins	C_j	- -	- -	0.7 0.4	pF

TOP DYNAMIC

ESDLC8455MP-HAF

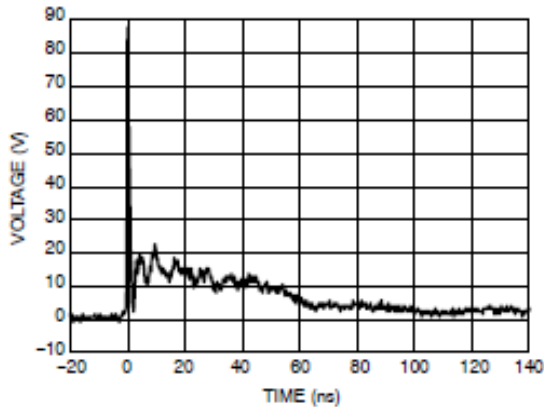


Figure 1.
IEC61000-4-2 +8 kV Contact ESD
Clamping Voltage

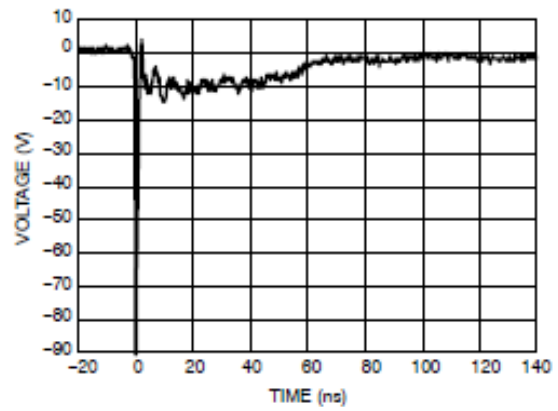


Figure 2.
IEC61000-4-2 -8 kV Contact
Clamping Voltage

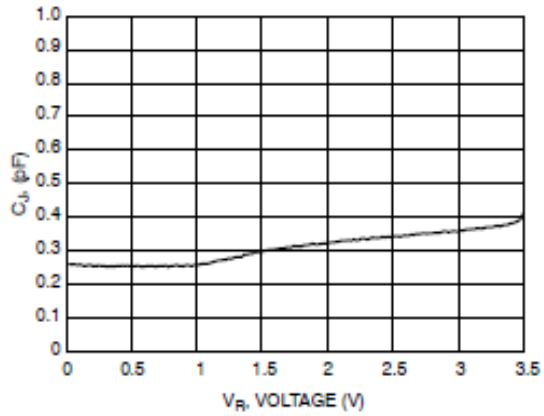


Figure 3.
Junction Capacitance; $V_R = 3.5\text{ V} - 0\text{ V}$, $f = 1\text{ MHz}$

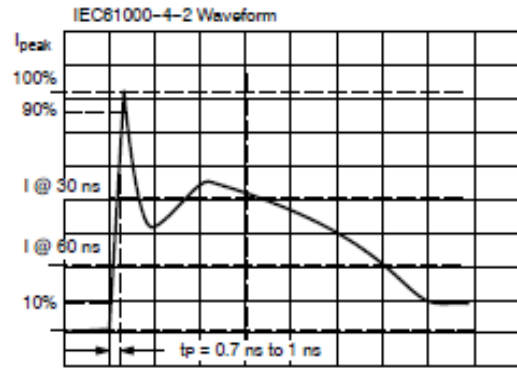
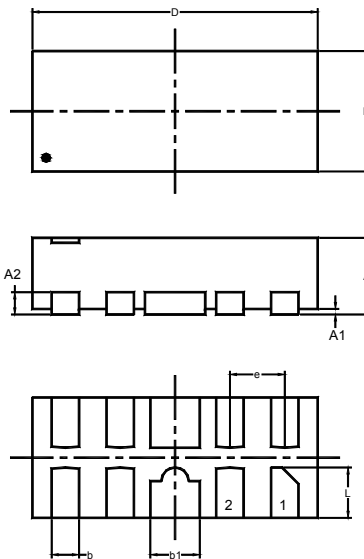


Figure 4.
IEC61000-4-2 Spec

ESDLC8455MP-HAF

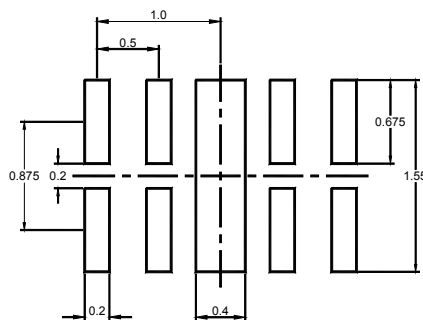
Package Outline Dimensions (Units: mm)

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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