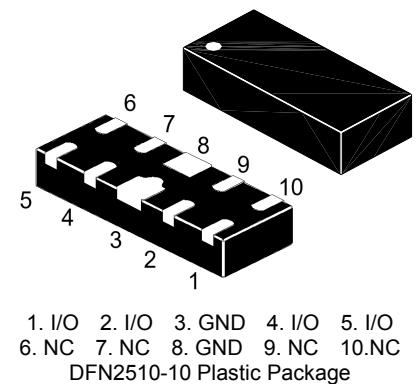
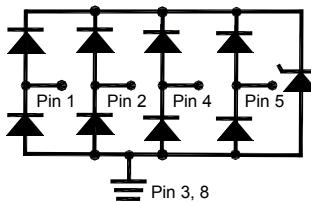


ESDLC0524AMP-CH

ESD Protection Diode

Features

- AEC-Q101 Qualified
- Low clamping voltage
- Low capacitance
- Protects two or four I/O Lines
- Halogen and Antimony Free(HAF), RoHS compliant



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}	150	W
Peak Pulse Current ($tp = 8/20 \mu\text{s}$)	I_{PP}	5	A
ESD (IEC61000-4-2) Air Contact	V_{ESD}	± 17 ± 12	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 Working Voltage, Any I/O Pin to Gnd	V_{RWM}	-	5	V
Reverse Breakdown Voltage at $I_T = 1 \text{ mA}$, Any I/O Pin to Gnd	$V_{(BR)R}$	6	-	V
Reverse Current at $V_{RWM} = 5 \text{ V}$, Any I/O Pin to Gnd	I_R	-	1	μA
Clamping Voltage at $I_{PP} = 1 \text{ A}$, $tp = 8/20 \mu\text{s}$, Any I/O Pin to Gnd at $I_{PP} = 5 \text{ A}$, $tp = 8/20 \mu\text{s}$, Any I/O Pin to Gnd	V_C	-	15 30	V
Junction Capacitance at $V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$, Any I/O Pin to Gnd at $V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$, Between I/O Pins	C_j	-	0.8 0.45	pF

ESDLC0524AMP-CH

Electrical Characteristics Curves

Fig 1. Pulse Waveform

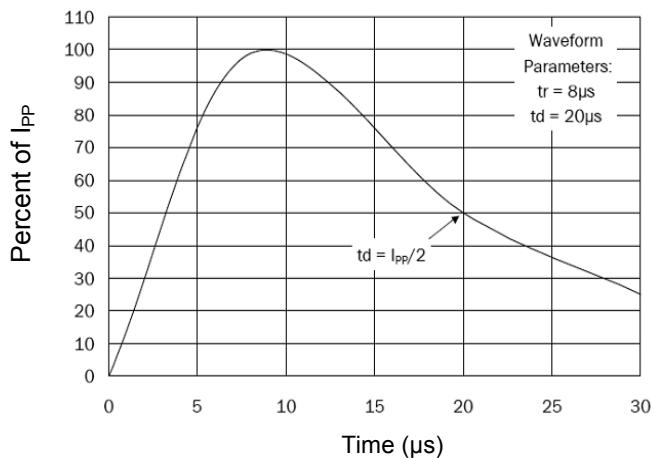


Fig 2. Power Derating Curve

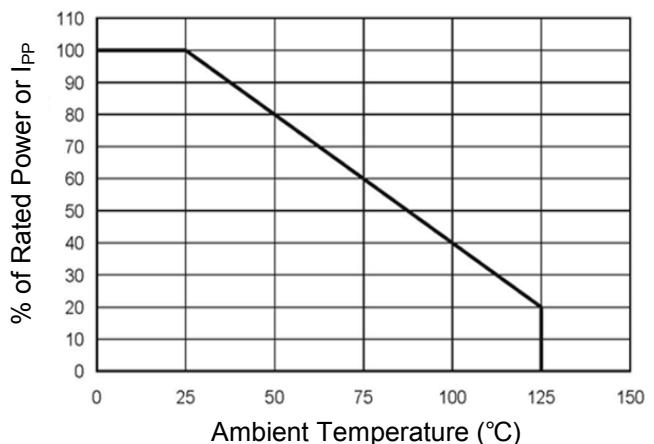


Fig 3. Clamping Voltage Curve

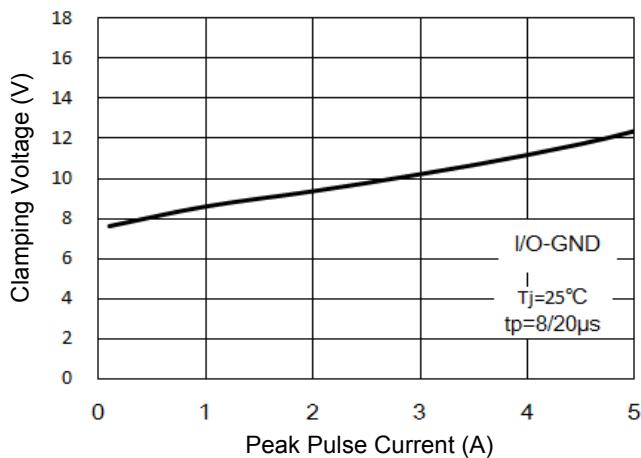


Fig 4. Junction Capacitance

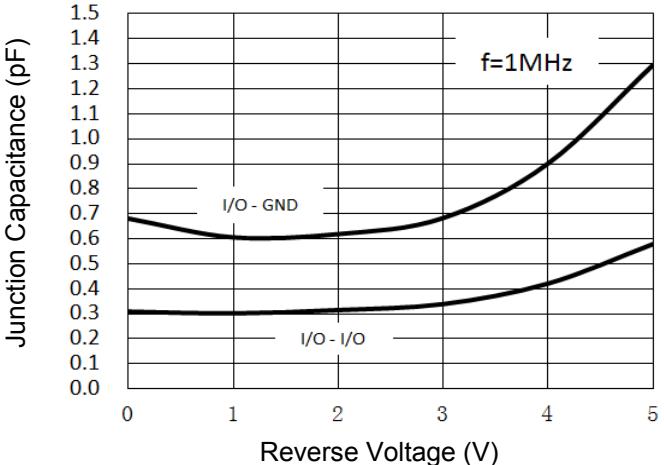
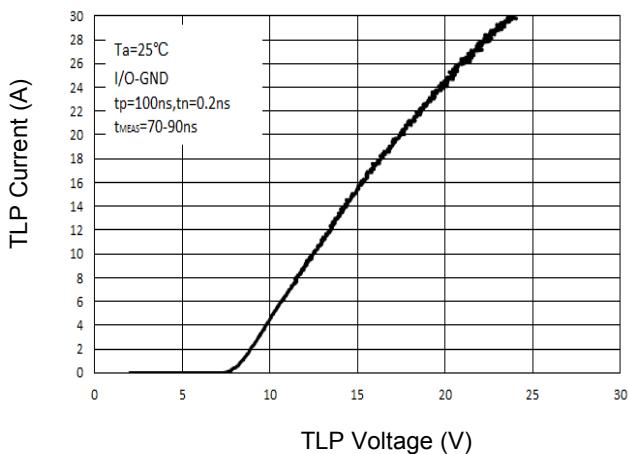


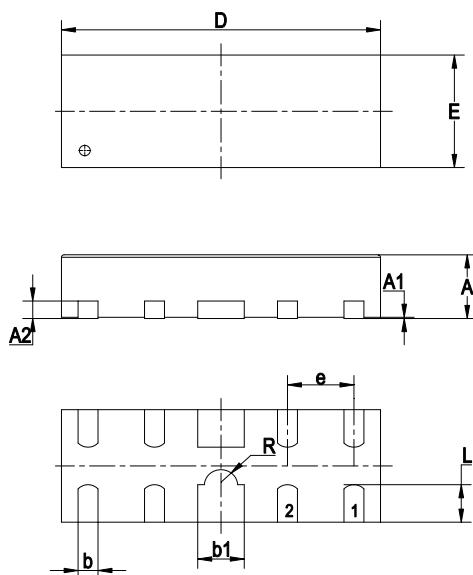
Fig. 5 TLP Curve



ESDLC0524AMP-CH

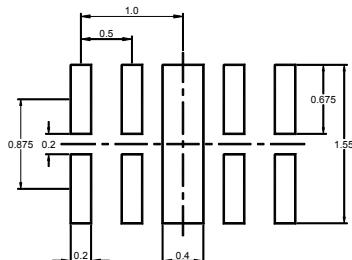
Package Outline Dimensions (Units: mm)

DFN2510-10



UNIT	A	A1	A2	b	b1	D	E	e	L	R
mm	0.46	0	0.13	0.15	0.35	2.40	0.90	0.50	0.30	0.125
	0.51	0.05	Typ.	0.25	0.45	2.60	1.10	Typ.	0.425	Typ.

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

Marking information

" 24A " = Part No.

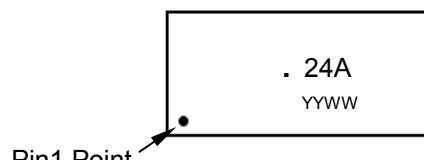
" • " = HAF (Halogen and Antimony Free)

" YYWW " = Date Code Marking

" YY " = Year

" WW " = Week

Font type: Arial



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