



SE05L8ADVH

ESD PROTECTION ARRAY

FEATURES

- Low Capacitance
- Low Leakage Current
- Working voltage: 5.0V
- Suffix "H" indicates Halogen-free parts, ex.SE05L8ADVH

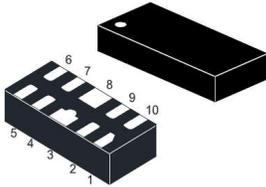
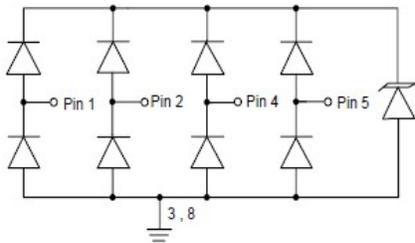
APPLICATIONS

- Digital Visual Interface(DVI)
- PCI Express
- High Definition Multi-Media Interface(HDMI)
- Serial ATA

MECHANICAL DATA

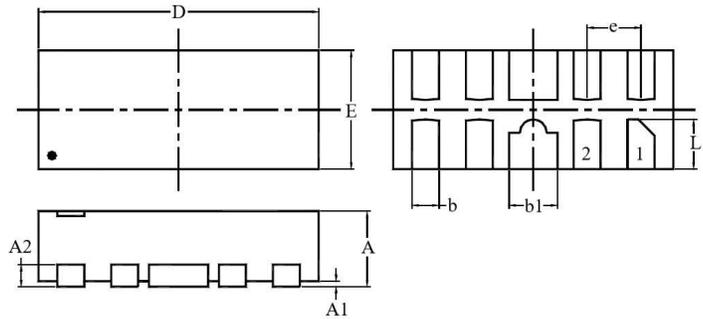
Case : DFN2510(DFN2510-10L) Package

CIRCUIT DIAGRAM



1. I/O 2. I/O 3. GND 4. I/O 5. I/O
6. NC 7. NC 8. GND 9. NC 10. NC

OUTLINE DRAWING AND DIMENSION



Dimensions	Unit (mm)		Unit (inch)	
	MIN.	MAX.	MIN.	MAX.
A	0.460	0.510	0.018	0.020
A1	0.000	0.050	0.000	0.002
A2	0.130		0.005	
b	0.150	0.250	0.006	0.010
b1	0.350	0.450	0.014	0.018
D	2.400	2.600	0.094	0.102
E	0.900	1.100	0.035	0.043
e	0.500		0.020	
L	0.300	0.425	0.012	0.017

Maximum Ratings (Rating at 25°C ambient temperature unless otherwise specified)

Parameter	Symbol	Value	Units
Peak Pulse Power ($t_p=8/20\mu s$)	P_{PP}	75	W
Peak Pulse Current ($t_p=8/20\mu s$)	I_{PP}	5	A
ESD per IEC 61000-4-2 (Air)	V_{ESD}	± 28	kV
ESD per IEC 61000-4-2 (Contact)		± 25	
Operating Temperature Range	T_j	-55 to +125	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C



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Electrical Characteristics (Rating at 25°C ambient temperature unless otherwise specified)

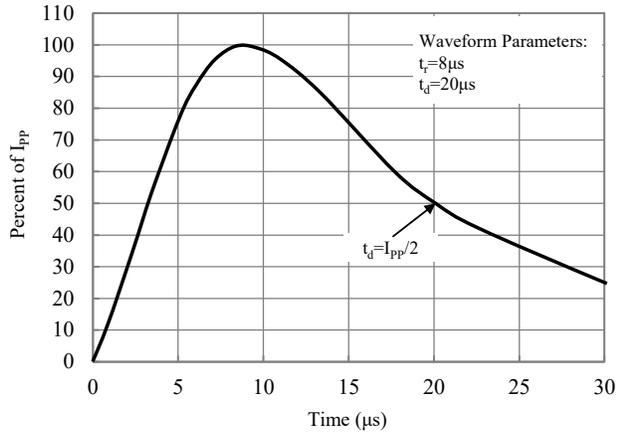
Parameter	Test Condition	Symbol	Min.	Typ.	Max.	Units
Working Peak Reverse Voltage	Any I/O pin to Ground	V_{RWM}	-	-	5.0	V
Punch Through Voltage	$I_{PT}=1\text{mA}$ Any I/O pin to Ground	V_{BR}	6.5	-	11.0	V
Reverse Leakage Current	$V_{RWM}=5\text{V}$ Any I/O pin to Ground	I_R	-	-	0.1	μA
Clamping Voltage	$I_{pp}=1\text{A}$, Any I/O pin to Ground	V_C	-	-	12.0	V
	$I_{pp}=5\text{A}$, Any I/O pin to Ground		-	-	15.0	V
Junction Capacitance	$V_R=0\text{V}$, $f=1\text{MHz}$, Between I/O pins	C_j	-	-	0.40	pF
	$V_R=0\text{V}$, $f=1\text{MHz}$, Any I/O pin to Ground		-	-	0.85	pF



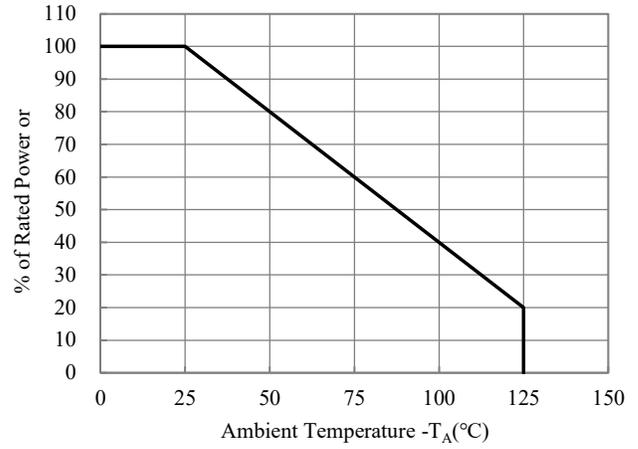
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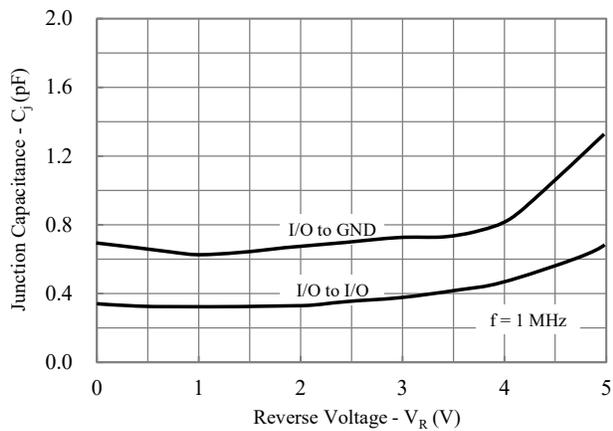
RATINGS AND CHARACTERISTIC CURVES



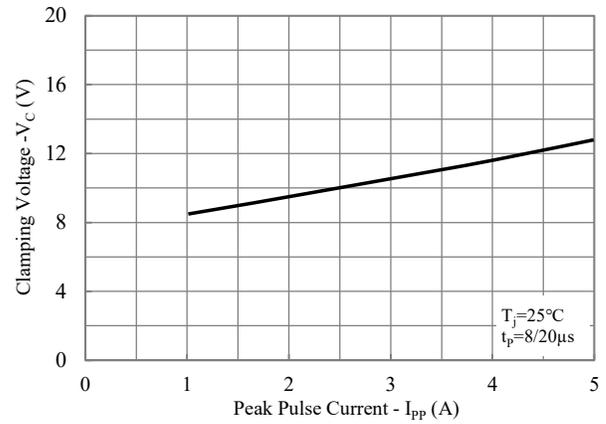
Pulse Waveform



Power Derating Curve



Junction Capacitance vs. Reverse Voltage



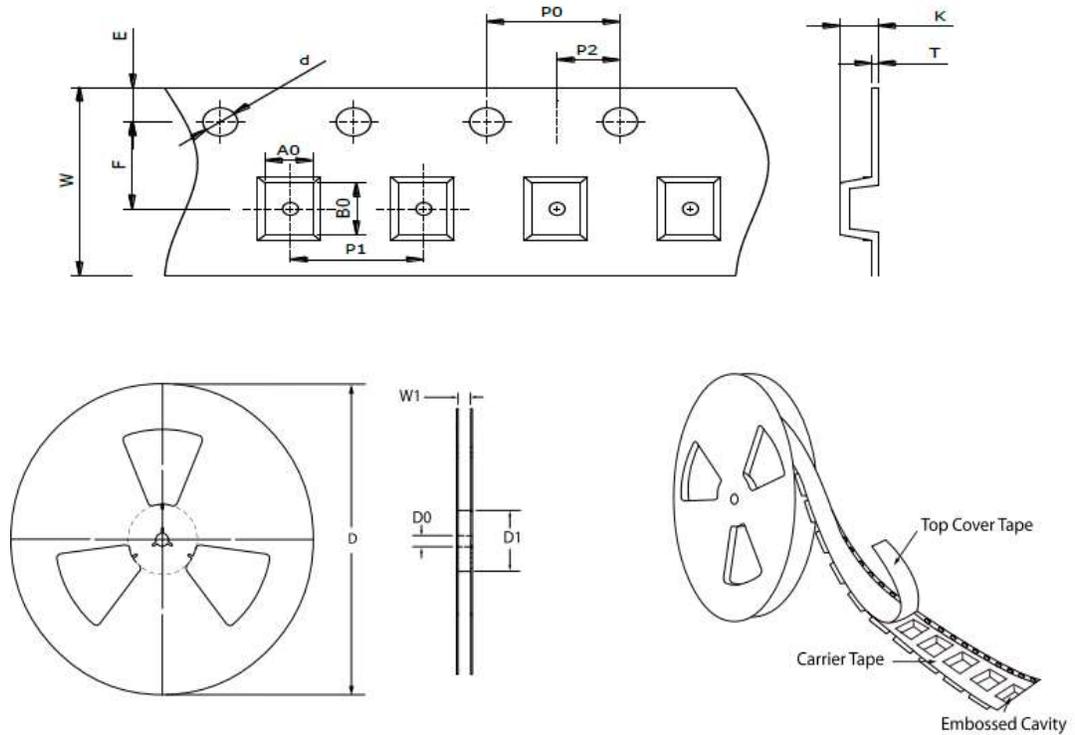
Clamping Voltage vs. Peak Pulse Current



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TAPE & REEL SPECIFICATION



Item	Symbol	DFN2510
Carrier width	A ₀	1.20 ± 0.10
Carrier length	B ₀	2.70 ± 0.10
Carrier depth	K	0.65 ± 0.10
Sprocket hole	d	1.50 ± 0.10
Reel outside diameter	D	178.00 ± 2.00
Feed hole width	D ₀	13.00 ± 0.20
Reel inner diameter	D ₁	MIN. 54.00
Sprocket hole position	E	1.75 ± 0.10
Punch hole position	F	3.50 ± 0.10
Sprocket hole pitch	P ₀	4.00 ± 0.10
Punch hole pitch	P ₁	4.00 ± 0.10
Embossment center	P ₂	2.00 ± 0.10
Overall tape thickness	T	0.20 ± 0.05
Tape width	W	8.00 ± 0.20
Reel width	W1	MAX. 13.50

ORDER INFORMATION

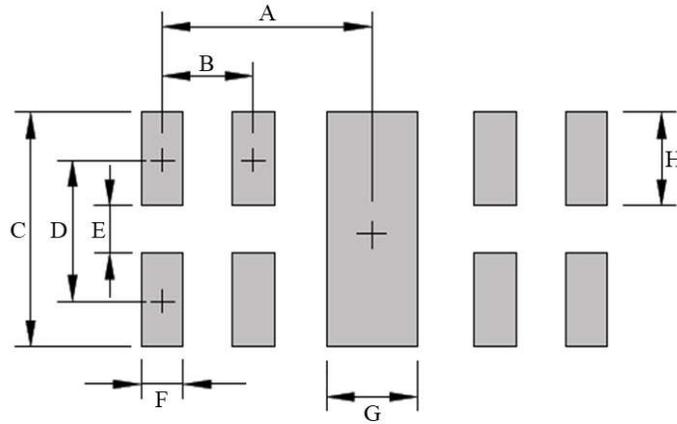
Package	Marking Code	Reel Size	Quantity
DFN2510	V5	7"	4,000



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SUGGESTED SOLDER PAD LAYOUT



Unit : mm

PACKAGE	A	B	C	D	E	F	G	H
DFN2510	1.000	0.500	1.550	0.875	0.200	0.200	0.400	0.675