# MSKSEMI 美森科













ESD

T\/9

TSS

MOV

GDT

PIFD

AZ1045-08F-MS

**Product specification** 





#### **FEATURES**

- Transient protection for high-speed data lines
- IEC 61000-4-2(ESD) ±25KV(Air)
- ±20KV(Contact)
- IEC 61000-4-4(EFT)40A(5/50ns)
- Cable Discharge Event(CDE)
- Package optimized for high-speed lines
- Ultra-small package(3.8mm\*1.0mm\*0.5mm)
- Protects eight data lines
- Low capacitance: 0.2pF (I/O to I/O)
- Low leakage current
- Low clamping voltage
- Each I/O pin can withstand over 1000 ESD strikes
- for ±8KV contact discharge

## **APPLICATIONS**

- SATA and eSATA interface
- LVDS interfaces
- Desktops, Servers and Notebooks
- MDDI Ports
- Display Ports
- High Definition Multi-Media Interface (HDMI)
- Digital Visual Interface (DVI)

### **MACHANICAL DATA**

- DFN3810-9L package
- Flammability Rating: UL 94V-0
- Terminal: Matte tin plated.
- Packaging: Tape and Reel
- High temperature soldering guaranted:260 °C/10s
- Reel size: 7 inch

## **Reference News**

PACKAGE OUTLINE	CIRCUIT DIAGRAM	PIN CONFIGURATION	MARKING
	1 2 4 5 6 7 8 9 A A A A A A A A A A A A A A A A A A	9 8 7 6	0508P
DFN3810-9L		U	



## **ABSOLUTE MAXIMUM RATING**

Symbol	Parameter	Value	Units	
P <sub>PP</sub>	Peak Pulse Power (8/20µs)	60	W	
V <sub>ESD</sub>	ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	±25 ±20	kV	
Торт	Operating Temperature	-55/+125	°C	
T <sub>STG</sub>	Storage Temperature	-55/+150	°C	

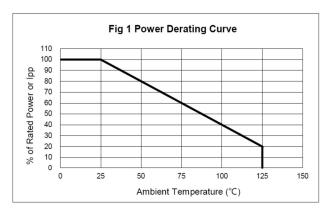
# **ELECTRICAL CHARACTERISTICS (Tamb=25℃)**

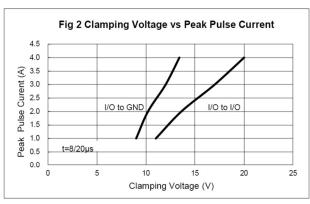
Symbol	Parameter	Test Condition	Min	Тур	Max	Units
V <sub>RWM</sub>	Reverse Working Voltage	Any I/O pin to GND			5.0	V
V <sub>BR</sub>	Reverse Breakdown Voltage	ੀ⊤ = 1mA Any I/O pin to GND	6.0		9.0	V
<b>I</b> R	Reverse Leakage Current	V <sub>RWM</sub> = 5V Any I/O pin to GND			1.0	μA
Vc	Clamping Voltage	$I_{PP}$ = 1A, $t_p$ = 8/20 $\mu$ s Any I/O pin to GND			10	V
Vc	Clamping Voltage	I <sub>PP</sub> = 4A, t <sub>p</sub> = 8/20μs Any I/O pin to GND			15	V
C <sub>ESD</sub>	Parasitic Capacitance	V <sub>R</sub> = 0V, f = 1MHz Between I/O and GND		0.4	0.5	pF
C <sub>ESD</sub>	Parasitic Capacitance	V <sub>R</sub> = 0V, f = 1MHz Between I/O and I/O		0.2	0.3	pF

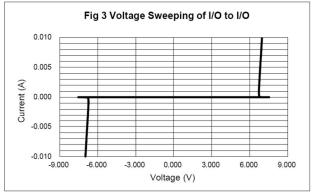
Note: I/O pins are pin 1,2,4,5, 6,7,8,9; GND pins are pin 3.

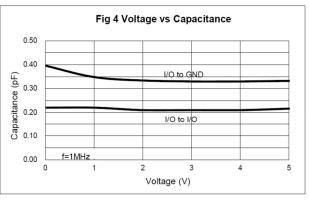


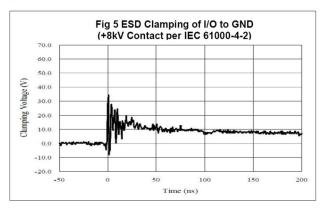
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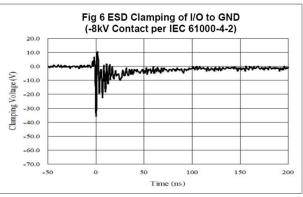


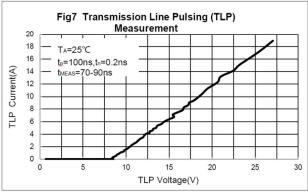






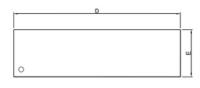




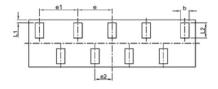




# **DFN3810-9 PACKAGE OUTLINE DIMENSIONS**







UNIT	Α	A1	b	D	E	е	e1	e2	L1	L2
mm	0.475 0.525	0 0.05	0.15 0.25	3.70 3.90	0.90 1.10	0.80	0.90	0.40	0.025 0.075	0.25 0.35

# **REEL SPECIFICATION**

P/N	PKG	QTY
AZ1045-08F-MS	DFN3810-9L	3000



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