

Ultra LowCapacitance ESD Protection Array

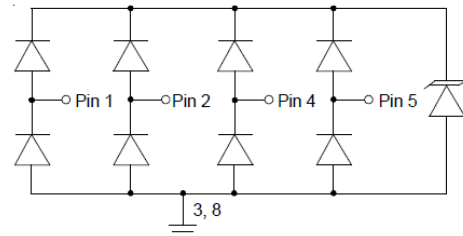
Features

- Protects two or four I/O lines
- Low capacitance: 0.3pF Typical between I/O channel
- Low leakage current
- 5V operating voltage
- Response time < 1ns
- Solid-state silicon avalanche technology
- Device meets MSL 1 requirements
- RoHS compliant

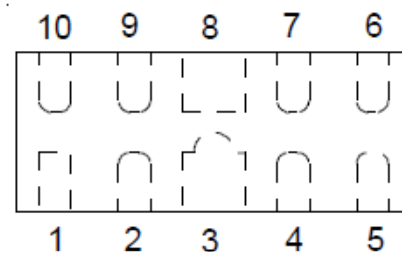
Applications

- High Definition Multi-Media Interface (HDMI)
- Digital Visual Interface (DVI)
- USB 1.1/2.0/3.0/OTG
- IEEE 1394 Firewire Ports
- Notebooks & Handhelds
- Projection TV & Monitors
- Set-top box
- Flat Panel Displays

Circuit Diagram



PIN Diagram



MARKING: 117** or 0524*

Device	Package	Reel Size	Qty / Reel
AZ1045-04F	DFN2510-10L	7 inch	3000

Absolute Maximum Ratings (TA=25°C unless otherwise specified)

Symbol	Parameter	Value	Unit
PPK	Peak Pulse Power	150	W
IPP	Peak Pulse Current	5	A
VESD (Contact)	Contact ESD Voltage per IEC61000-4-2	12	kV
VESD (Air)	Air ESD Voltage per IEC61000-4-2	17	kV
TJ	Junction Temperature	-55 to +125	°C
TSTG	Storage Temperature	-55 to +150	°C

Electrical Characteristics (TA=25°C unless otherwise specified)

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
VRWM	Reverse Working Peak Voltage				5	V
VBR	Reverse Breakdown Voltage	IT = 1mA	6			V
IR	Reverse Leakage Current	VRWM = 5V			1	μA
VC	Clamping Voltage	IPP = 1A (8/20μs)			15	V
CJ	Capacitance	VR = 0V, f = 1MHz Between I/O pins			5	pF
CJ	Capacitance	VR = 0V, f = 1MHz Any I/O pin to ground			5	pF

Typical Characteristics

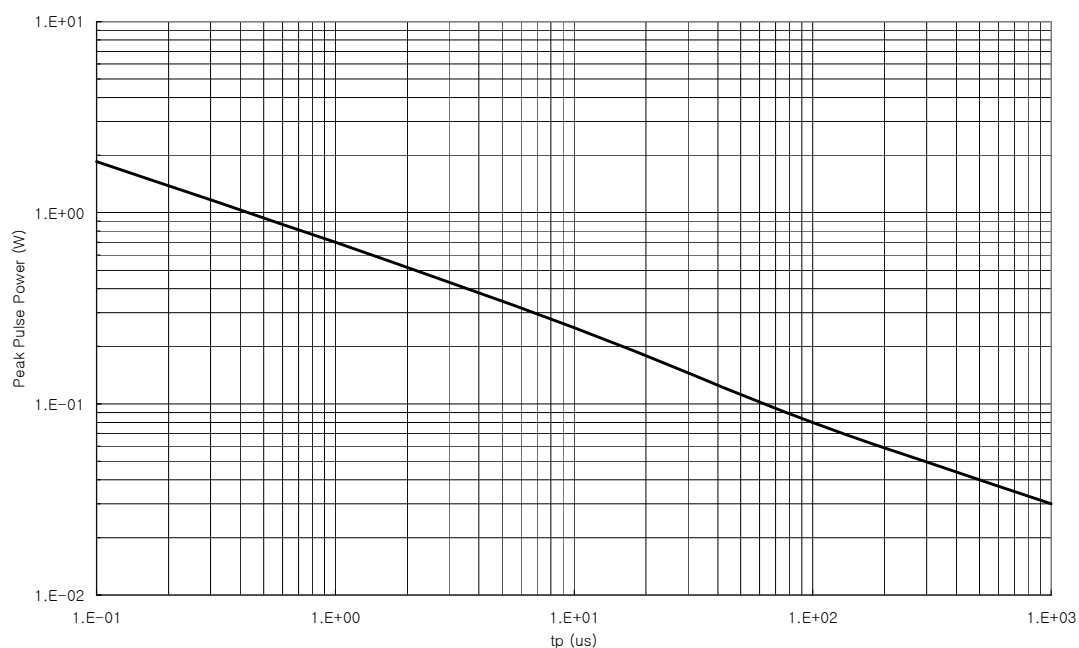


Figure 1. Peak Pulse Power Derating

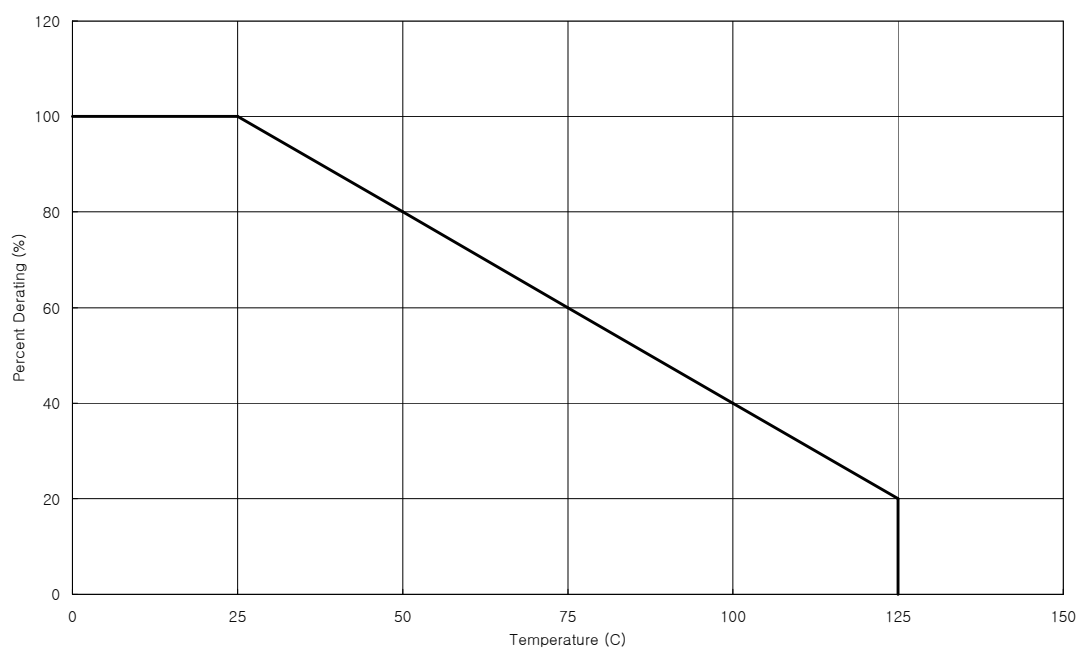


Figure 2. Peak Pulse Power Derating vs Temperature

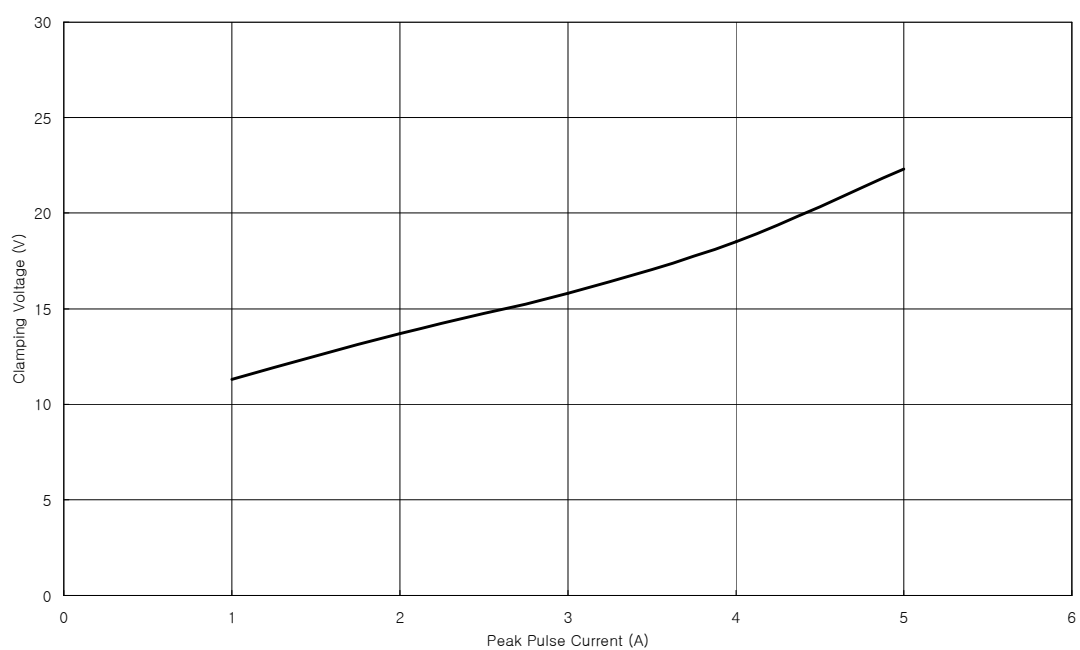
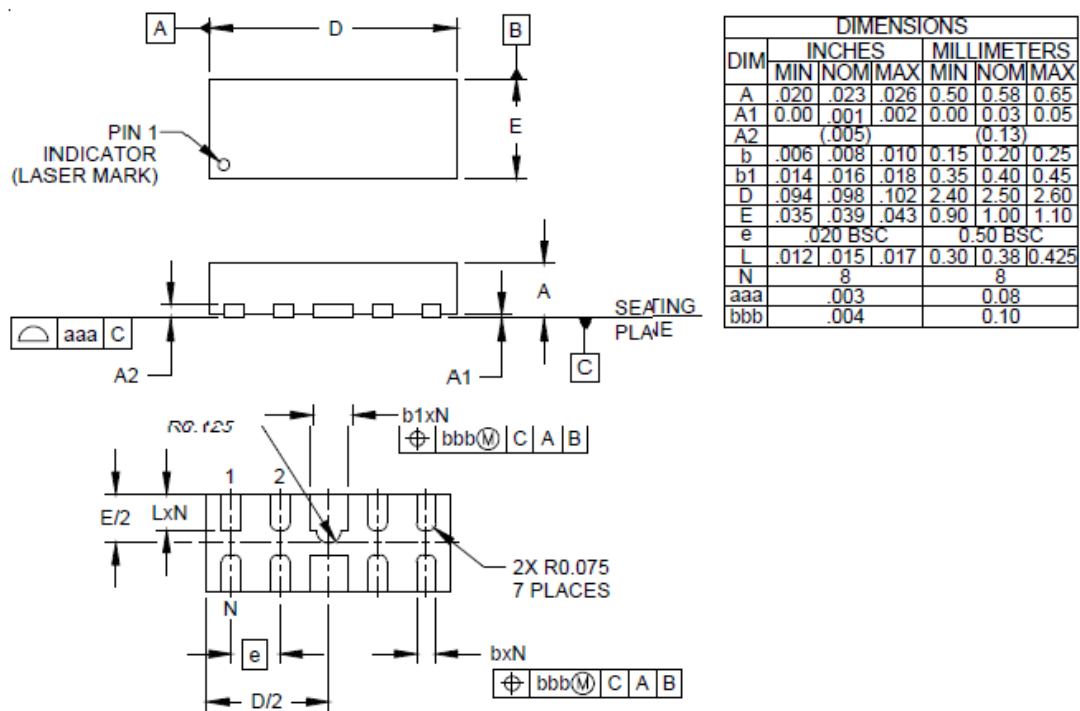


Figure 3. Peak Pulse Current vs Clamping Voltage

DFN2.5x1.0-10L Dimension



NOTES:

1. CONTROLLING DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES).