

# Product data sheet

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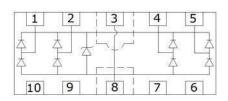
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### Features

80 Watts peak pulse power (tp = 8/20µs) Transient protection for high speed data lines to IEC 61000-4-2 (ESD) ±15kV (air), ±8kV (contact) IEC 61000-4-4 (EFT) 40A (5/50ns) Working voltages : 5V Protects two or four I/O lines Ultra Low capacitance:0.3pf (typical between I/O channel) Low operating and clamping voltages Solid-state silicon avalanchetechnology





**DFN2510** 

# Applications

High Definition Multi-Media Interface (HDMI) USB 1.1/2.0/3.0/OTG IEEE 1394 Firewire Ports Projection TV Monitors and Flat Panel Displays Notebook Computers Set Top Box

# Maximum Rating @ Ta=25°Cunless otherwise specified

Symbol	Parameter	Ratings	Units
Ррк	Peak Pulse Power (tp = 8/20µs)	80	Watts
TL	Lead Soldering Temperature	260(10sec.)	°C
TJ	Operating Temperature	-55 to +125	°C
T <sub>STG</sub>	Storage Temperature	-55 to +150	°C

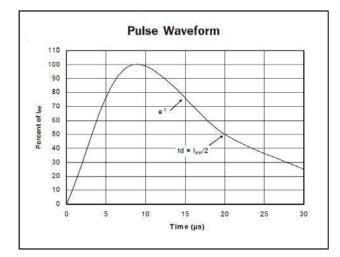


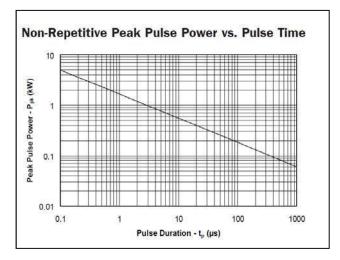
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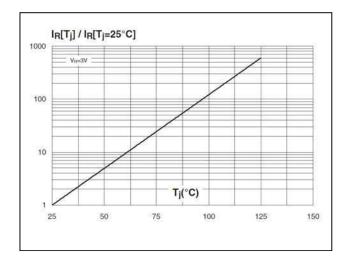
# Electrical Characteristics@ Ta=25°Cunless otherwise

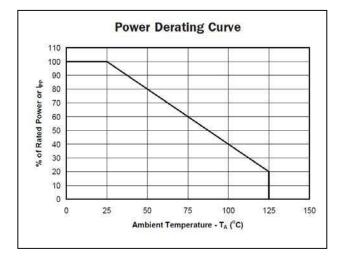
Symbol	Parameter	Conditions	Min.	Тур.	Max.	Units
V <sub>RWM</sub>	Reverse Working Voltage	Any I/O to Ground			5.0	V
V <sub>BR</sub>	Reverse Breakdown Voltage	I⊤ = 1mA,	6.0			V
V BR		Any I/O to Ground				
	Reverse Leakage Current	$V_{RWM} = 5V,$			1	μA
I <sub>R</sub>		Any I/O to Ground			1	
VF	Diode Forward Voltage	I <sub>F</sub> = 15mA		0.85	1.2	V
		I <sub>PP</sub> = 1A, tp =8/20μs,			0.0	V
N.		any I/O pin to Ground			9.8	
Vc	Clamping Voltage	I <sub>PP</sub> = 3.5A, tp =8/20μs,			15	V
		any I/O pin to Ground		15	15	v
6	Junction Capacitance	V <sub>R</sub> = 0V, f = 1MHz,			0.05	pF
		between I/O pins			0.05	
CJ		V <sub>R</sub> = 0V, f = 1MHz,			0.08	pF
		any I/O pin to Ground				

# Typical Characteristics@ Ta=25°Cunless otherwise specified





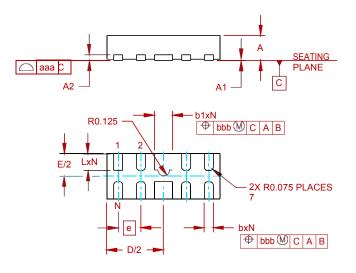




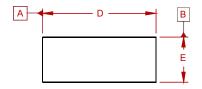




# PACKAGE MECHANICAL DATA

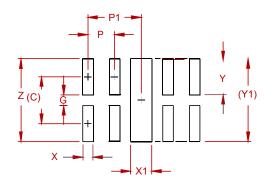


Dimensions in millimeters



		DIMENS	1	ONS			
DIM	INCHES			MILLIN	MILLIMETERS		
2	MIN	NOM	MAX	MIN	NOM	MAX	
Α	.020	.023	.026	0.50	0.58	0.65	
A1	0.00	.001	.002	0.00	0.03	0.05	
A2	(.005)		(0.13)				
b	.006	.008	.010	0.15	0.20	0.25	
b1	.014	.016	.018	0.35	0.40	0.45	
D	.094	.098	.102	2.40	2.50	2.60	
E	.035	.039	.043	0.90	1.00	1.10	
е	.020 BSC		0.50 BSC				
L	.012	.015	.017	0.30	0.38	0.425	
N	8		8				
aaa	.003		0.08				
bbb	.004		0.10				

#### **Suggested Pad Layout**



DIMENSIONS				
DIM	INCHES	MILLIMETERS		
С	(.034)	(0.875)		
G	.008	0.20		
Р	.020	0.50		
P1	.039	1.00		
Х	.008	0.20		
X1	.016	0.40		
Y	.027	0.675		
Y1	(.061)	(1.55)		
Z	.061	1.55		

#### NOTES:

CONTROLLING DIMENSIONS ARE IN MILLIMETERS (ANGLES IN DEGREES). THIS LAND PATTERN IS FOR REFERENCE PURPOSES ONLY. CONSULT YOUR MANUFACTURING GROUP TO ENSURE YOUR COMPANY'S MANUFACTURING GUIDELINES ARE MET.

# **REEL SPECIFICATION**

P/N	PKG	QTY
AZ1045-04F-MS	DFN2510	3000



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