MSKSEMI















ESD

TVS

TSS

MOV

GDT

PLED

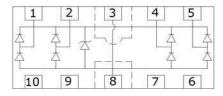
Broduct data sheet

Features

150 Watts peak pulse power (tp = $8/20\mu$ s) 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: 3.3V

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



DFN2510P10E

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

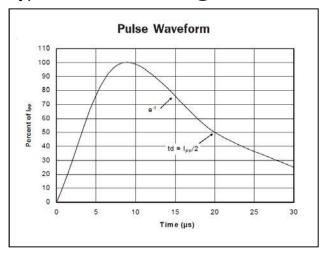
Maximum Rating @ Ta=25°C unless otherwise specified

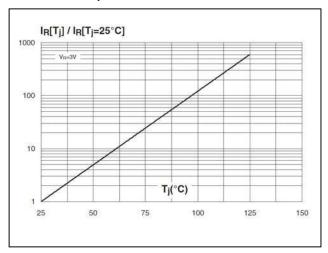
Symbol	Parameter	Ratings	Units
P _{PK}	Peak Pulse Power (tp = 8/20μs)	150	Watts
T _L	Lead Soldering Temperature	260(10sec.)	$^{\circ}$
TJ	Operating Temperature	-55 to +125	${\mathbb C}$
T _{STG}	Storage Temperature	-55 to +150	${\mathbb C}$

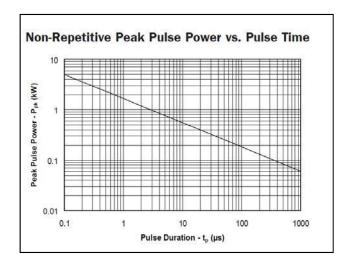
Electrical Characteristics@ Ta=25°C unless otherwise

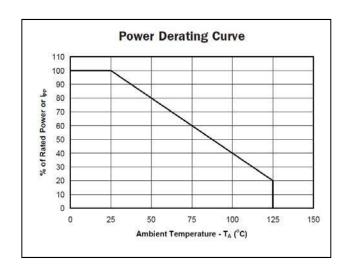
Symbol	Parameter	Conditions	Min.	Тур.	Max.	Units
V _{RWM}	Reverse Working Voltage	Any I/O to Ground			3.3	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1mA$,	4.5			V
		Any I/O to Ground				-
I _R	Reverse Leakage Current	$V_{RWM} = 5V$,			1	μA
		Any I/O to Ground				
V _F	Diode Forward Voltage	I _F = 15mA		0.85	1.2	V
	Clamping Voltage	I_{PP} = 1A, tp =8/20 μ s,			9.8	V
		any I/O pin to Ground				
Vc		I_{PP} = 5A, tp =8/20 μ s,			15	V
		any I/O pin to Ground				
CJ	Junction Capacitance	$V_R = 0V$, $f = 1MHz$,	0.25	0.0	,,,	
		between I/O pins		0.25	0.3	pF
		V _R = 0V, f = 1MHz,	0.5	0.5	0.6	pF
		any I/O pin to Ground		0.5		

Typical Characteristics@ Ta=25°C unless otherwise specified



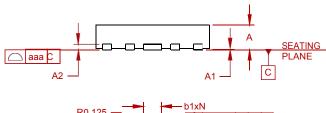


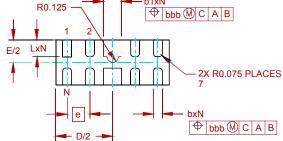




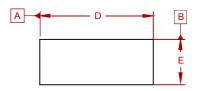


PACKAGE MECHANICAL DATA



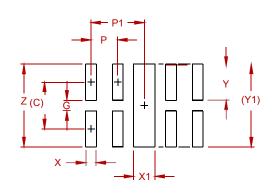


Dimensions in millimeters



DIMENSI ONS						
DIM	INCHES		MILLIMETERS			
J	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	
Υ	.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
AZ1143-04F-MS	DFN2510P10E	3000

Compiance





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