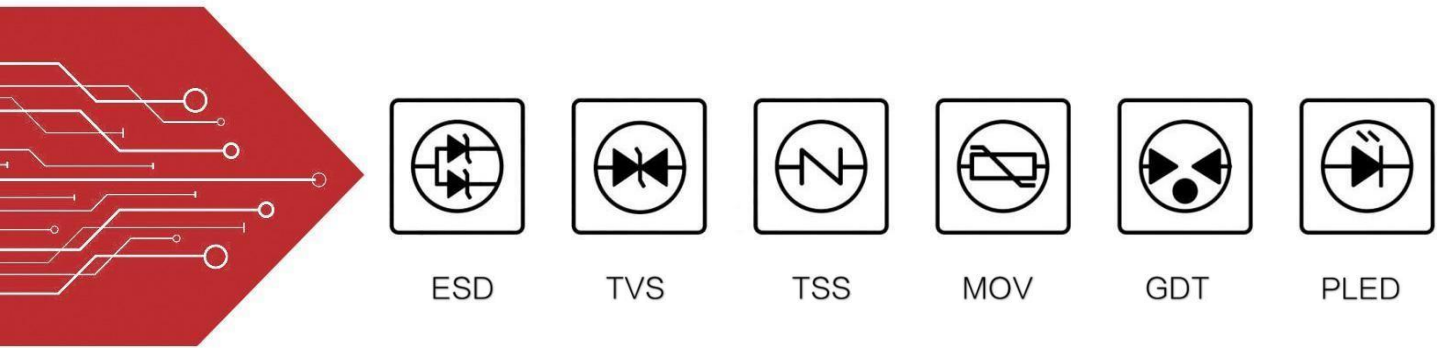
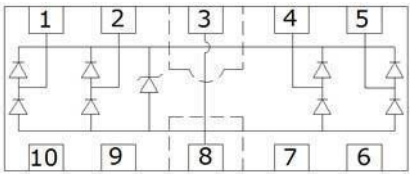
MSKSEMI
SEMICONDUCTOR

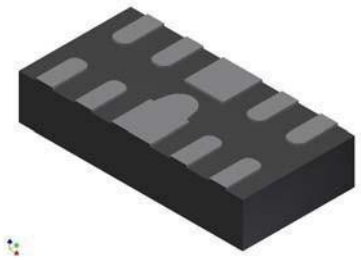


Product data sheet

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

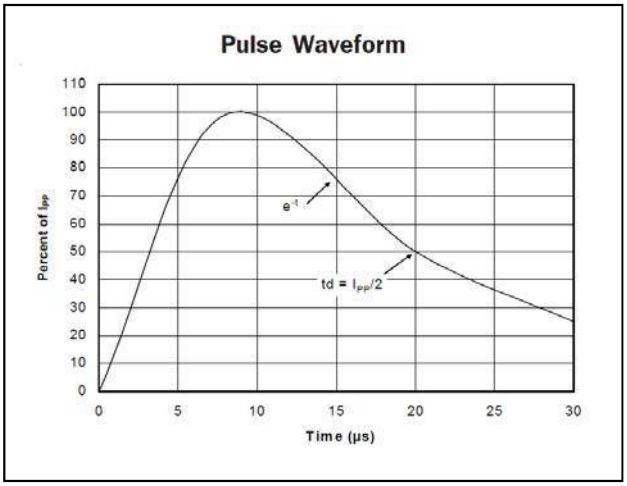
Maximum Rating @ Ta=25℃unless otherwise specified

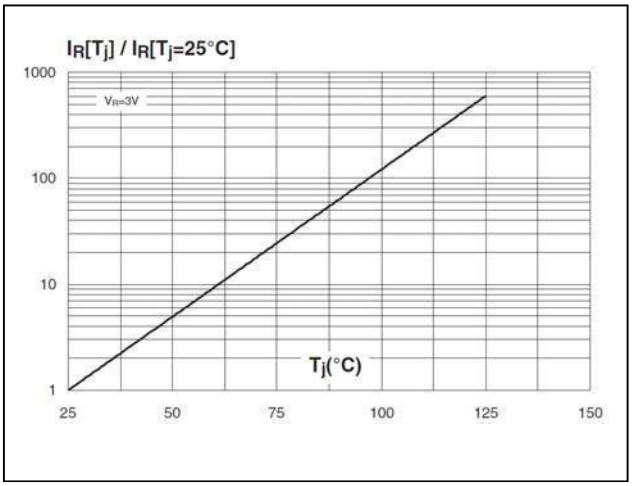
Symbol	Parameter	Ratings	Units
P_{PK}	Peak Pulse Power (tp = 8/20μs)	80	Watts
T_L	Lead Soldering Temperature	260(10sec.)	℃
T_J	Operating Temperature	-55 to +125	℃
T_{STG}	Storage Temperature	-55 to +150	℃

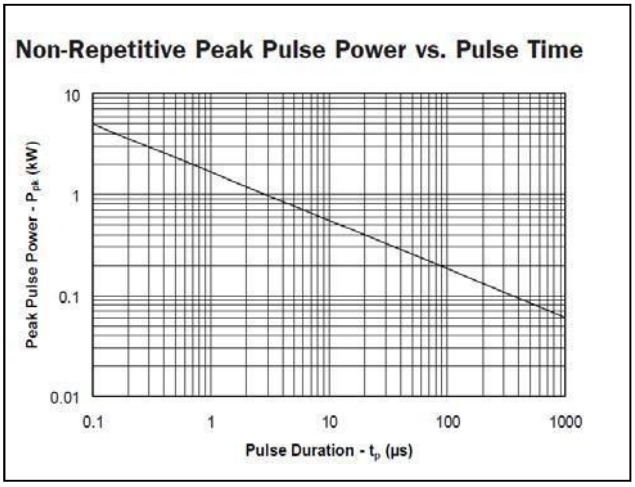
Electrical Characteristics@ Ta=25℃unless otherwise

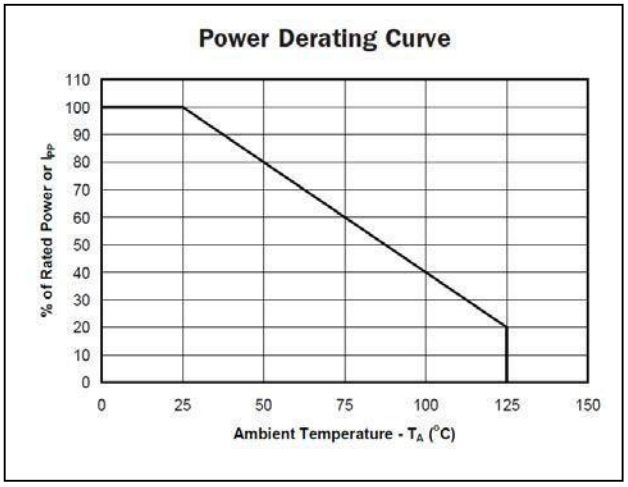
Symbol	Parameter	Conditions	Min.	Typ.	Max.	Units
V_{RWM}	Reverse Working Voltage	Any I/O to Ground			5.0	V
V_{BR}	Reverse Breakdown Voltage	I_T = 1mA, Any I/O to Ground	6.0			V
I_R	Reverse Leakage Current	V_{RWM} = 5V, Any I/O to Ground			1	μA
V_F	Diode Forward Voltage	I_F = 15mA		0.85	1.2	V
V_C	Clamping Voltage	I_{PP} = 1A, tp =8/20μs, any I/O pin to Ground			9.8	V
		I_{PP} = 3.5A, tp =8/20μs, any I/O pin to Ground			15	V
C_J	Junction Capacitance	V_R = 0V, f = 1MHz, between I/O pins			0.05	pF
		V_R = 0V, f = 1MHz, any I/O pin to Ground			0.08	pF

Typical Characteristics@ Ta=25℃unless otherwise specified

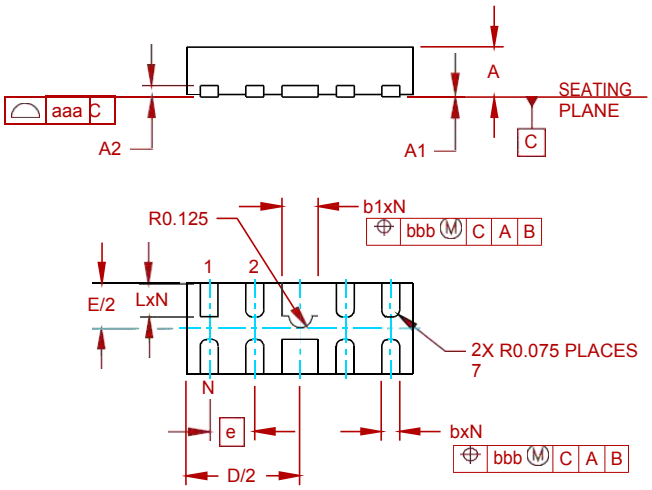


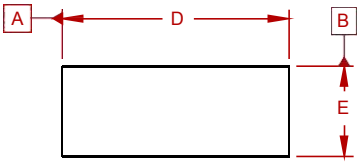






PACKAGE MECHANICAL DATA

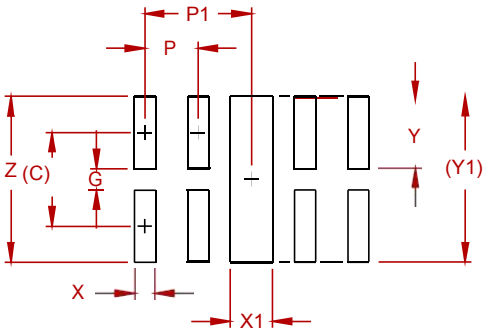




Dimensions in millimeters

DIM	DIMENSIONS					
	INCHES			MILLIMETERS		
	MIN	NOM	MAX	MIN	NOM	MAX
A	.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
e		.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
C	(.034)	(0.875)
G	.008	0.20
P	.020	0.50
P1	.039	1.00
X	.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).

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REEL SPECIFICATION

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

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