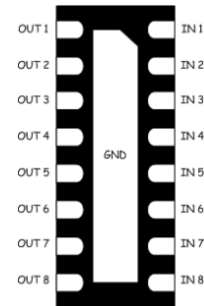


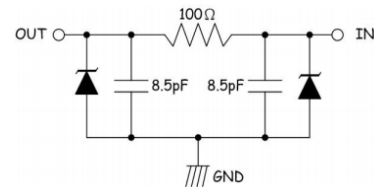
Features

- Ultra low leakage: nA level
- Operating voltage: 5V
- Low clamping voltage
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
 - Air discharge: $\pm 15\text{kV}$
 - Contact discharge: $\pm 8\text{kV}$
 - IEC61000-4-4 (EFT) 40A (5/50ns)
- RoHS Compliant

Dimensions DFN3314



Pin Configuration



Applications

- USB 2.0 power and data line
- Set-top box and digital TV
- Digital video interface (DVI)
- Notebook Computers
- SIM Ports
- 10/100 Ethernet

Mechanical Characteristics

- Package: DFN3314
- Lead Finish: Lead Free
- UL Flammability Classification Rating 94V-0
- Quantity Per Reel: 3,000 pcs
- Reel Size: 7 inch

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

Parameter	Symbol	Value	Unit
Lead Soldering Temperature	T _L	260 (10 sec.)	°C
ESD per IEC 61000-4-2 (Air)	V _{ESD}	± 15	Kv
ESD per IEC 61000-4-2 (Contact)		± 8	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{STJ}	-55 to +150	°C

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

Part Number	Device Marking	V _{RWM} (V)	V _{BR} (V)	R (Ω)	F3dB (MHz) Typ	F6dB (MHz) Typ	I _R (μA) (Max)	C @0V (Pf) (Typ.)	C @2.5V (Pf) (Typ.)
EM2378K	K38	5.0	6.0	100	250	295	0.5	12.8	8.5

Characteristic Curves

Fig1. 8/20μs Pulse Waveform



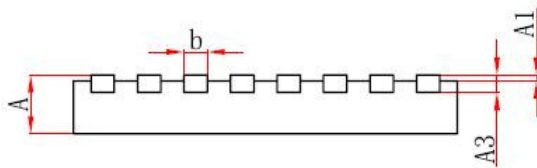
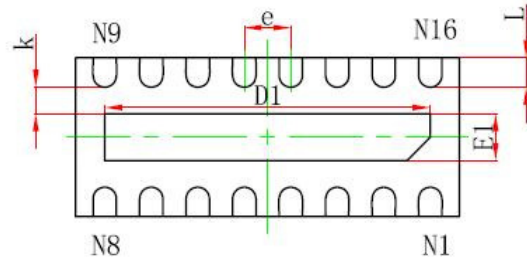
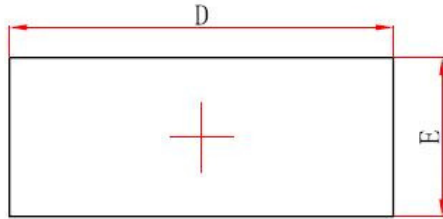
Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)



Fig3. Power Derating Curve

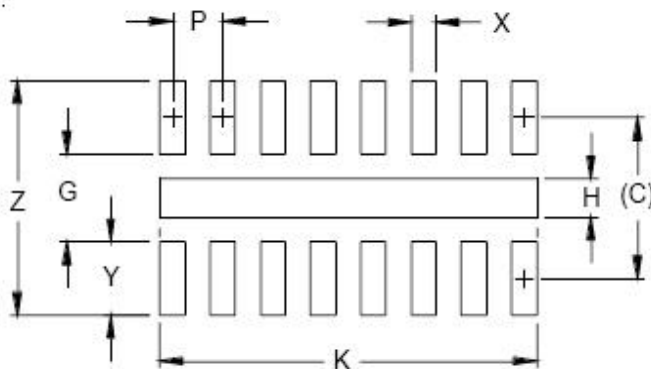


DFN3314 PACKAGE OUTLINE & DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.450/0.550	0.550/0.650	0.018/0.022	0.022/0.026
A1	0.000	0.050	0.000	0.002
A3	0.150REF.		0.006REF.	
D	3.224	3.376	0.127	0.133
E	1.274	1.426	0.050	0.056
D1	2.700	2.900	0.106	0.114
E1	0.300	0.500	0.012	0.020
k	0.200MIN		0.008MIN	
b	0.150	0.250	0.006	0.010
e	0.400TYP.		0.016TYP.	
L	0.174	0.326	0.007	0.013

* SOLDERING FOOTPRINT



DIMENSIONS		
DIM	INCHES	MILLIMETERS
C	(.050)	(1.27)
G	.027	0.69
H	.012	0.30
K	.118	3.00
P	.016	0.40
X	.008	0.20
Y	.023	0.58
Z	.073	1.85