NUP4202W1T2G

Features

- ◇ 70W (8/20μs) Peak Pulse Power
- ◇ Low Capacitance ESD Protection
- ◇ SOT-363 Package
- ◇ RoHS Compliant
- ◇ Matte Tin Lead finish (Pb-Free)
- ◇ Protect Four High Speed Data Lines and Vcc
- ◇ Meet IEC61000-4-2 Level 4:
  - Contact Discharge > 8kV
  - Air Discharge > 15kV

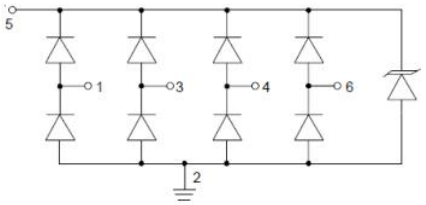
Applications

- ◇ USB 2.0
- ◇ USB OTG
- ◇ SIM Ports
- ◇ Gigabit Ethernet
- ◇ Notebook Computers
- ◇ Video Line Protection
- ◇ Digital Video Interface (DVI)
- ◇ IEEE 1394 Firewires Ports
- ◇ Monitors and Flat Panel Displays

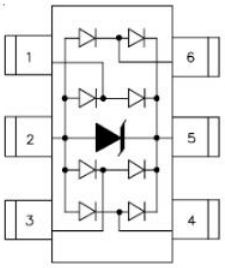
Ordering information

Device	Package	Making
NUP4202W1T2G	SOT-363	63

Circuit Diagram



PIN Diagram



Maximum Ratings (Ta = 25℃)

Symbol	Parameter	Value	Unit
P_{PK}	Peak Pulse Power	70	W
I_{PP}	Peak Pulse Current	4.5	A
V_{ESD} (Contact)	Contact ESD Voltage per IEC61000-4-2	20	kV
V_{ESD} (Air)	Air ESD Voltage per IEC61000-4-2	20	kV
TJ	Junction Temperature	-55 to +125	℃
TSTG	Storage Temperature	-55 to +150	℃

NUP4202W1T2G

Electrical Characteristics (Ta = 25℃)

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			3	μA
VC	Clamping Voltage	IPP = 1A (8/20μs)			12	V
VC	Clamping Voltage	IPP =4.5A(8/20μs)			18	V
CJ	Capacitance	VR = 0V, f = 1MHz Between I/O pins			0.4	pF
CJ	Capacitance	VR = 0V, f = 1MHz Any I/O to ground			1	pF

RATING AND CHARACTERISTIC CURVES (NUP4202W1T2G)

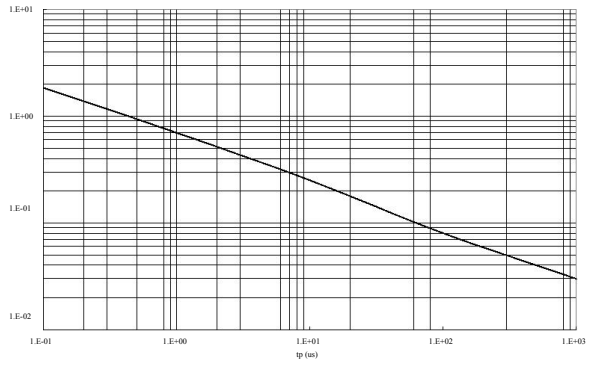


Figure 1. Peak Pulse Power Derating

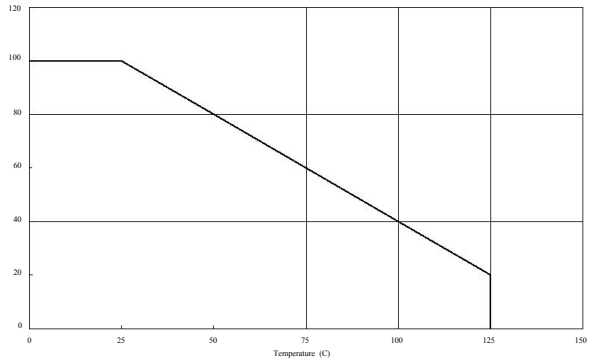


Figure 2. Peak Pulse Power Derating vs Temperature

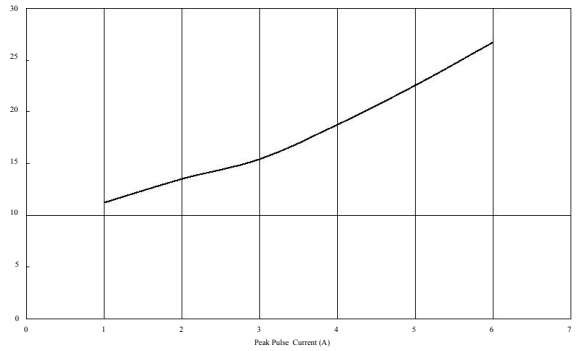


Figure 3. Peak Pulse Current vs Clamping Voltage

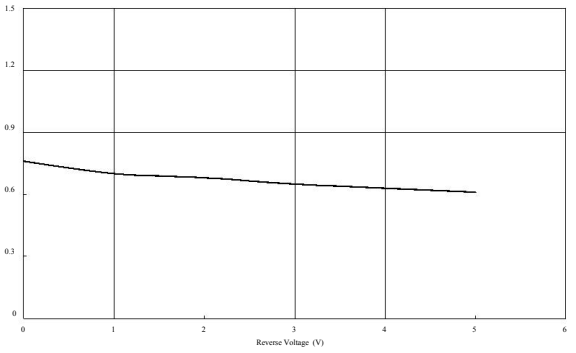
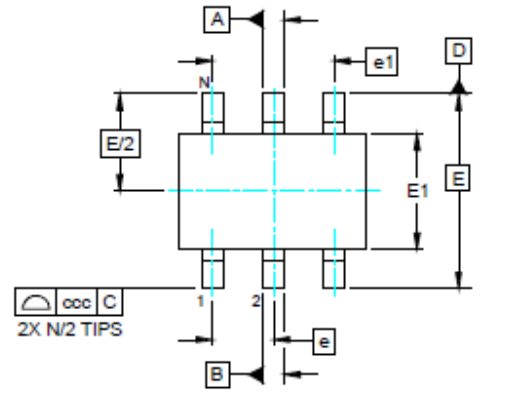
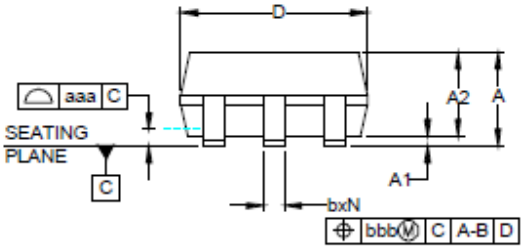
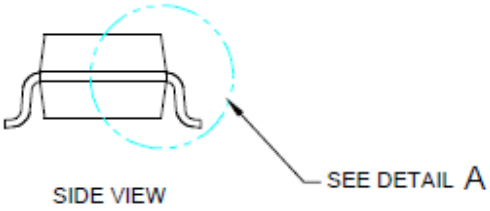


Figure 4. Reverse Voltage vs Capacitance

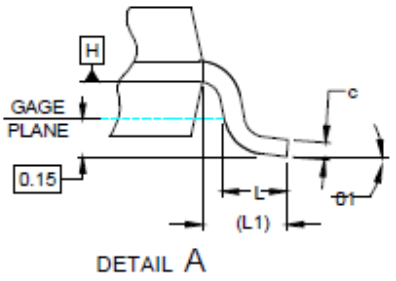
SOT-363 PACKAGE OUTLINE DIMENSIO







DIMENSIONS						
DIM	INCHES			MILLIMETERS		
	MIN	NOM	MAX	MIN	NOM	MAX
A	-	-	.043	-	-	1.10
A1	.000	-	.004	0.00	-	0.10
A2	.028	.035	.039	0.70	0.90	1.00
b	.006	-	.012	0.15	-	0.30
c	.003	-	.009	0.08	-	0.22
D	.071	.079	.087	1.80	2.00	2.20
E1	.045	.049	.053	1.15	1.25	1.35
E	.083 BSC			2.10 BSC		
e	.026 BSC			0.65 BSC		
e1	.051			1.30 BSC		
L	.010	.014	.018	0.26	0.36	0.46
L1	(.017)			(0.42)		
N	6			6		
θ1	0°	-	8°	0°	-	8°
aaa	.004			0.10		
bbb	.004			0.10		
ccc	.012			0.30		



DETAIL A

Unikeyic Electronics

Global Electronic Components Distributor

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GK:

1N5399 DSK36 K34 MB16F MM5Z5V6 1SMA4740A DSK110 MBRD3045 MM1Z6V2B 4N65F ES1236D2HA23 K16 MBRD1060 600R65 CDSOT23-SM712 F7 MB210F SS10100 ES05D1MC10 MB14S MM1Z4V7B US5M ES12D1HA03 MBRF30200CT PESD3V3L1BA SI2301S ES3.3D1HA03 BZT52C22 SR560L SS1060