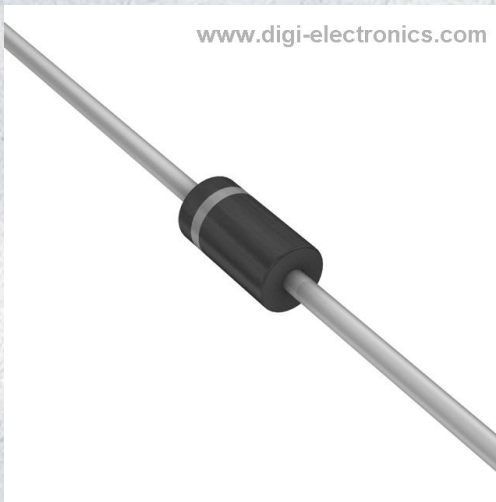


1N4936G Datasheet



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	1N4936G-DG
Manufacturer	onsemi
Manufacturer Product Number	1N4936G
Description	DIODE GEN PURP 400V 1A AXIAL
Detailed Description	Diode 400 V 1A Through Hole Axial

This model 1N4936G is available at DiGi Electronics.

DiGi Electronics offers a global database of semiconductor and electronic component datasheets.

We welcome your inquiries regarding pricing, lead time, or other product-related questions.

 [Request a Quote](#)

 [Datasheet Search](#)



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

1N4936G

Series:

-

Technology:

Standard

Current - Average Rectified (Io):

1A

Speed:

Fast Recovery =< 500ns, > 200mA (Io)

Current - Reverse Leakage @ Vr:

5 μ A @ 400 V

Mounting Type:

Through Hole

Supplier Device Package:

Axial

Base Product Number:

1N4936

Manufacturer:

onsemi

Product Status:

Not For New Designs

Voltage - DC Reverse (Vr) (Max):

400 V

Voltage - Forward (Vf) (Max) @ If:

1.2 V @ 1 A

Reverse Recovery Time (trr):

300 ns

Capacitance @ Vr, F:

-

Package / Case:

DO-204AL, DO-41, Axial

Operating Temperature - Junction:

-65°C ~ 150°C

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8541.10.0080

Moisture Sensitivity Level (MSL):

Not Applicable

ECCN:

EAR99

Axial-Lead Glass Passivated Fast Recovery Rectifiers

1N4933, 1N4934, 1N4935, 1N4936, 1N4937

Axial-lead, fast-recovery rectifiers are designed for special applications such as DC power supplies, inverters, converters, ultrasonic systems, choppers, low RF interference and free wheeling diodes. A complete line of fast recovery rectifiers having typical recovery time of 150 nanoseconds providing high efficiency at frequencies to 250 kHz.

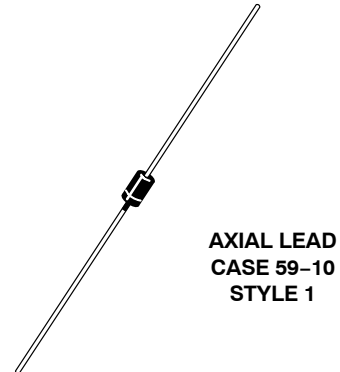
Features

- Shipped in Plastic Bags; 1,000 per Bag
- Available Tape and Reeled; 5,000 per Reel, by Adding a "RL" Suffix to the Part Number
- These are Pb-Free Devices*

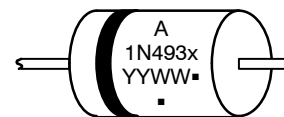
Mechanical Characteristics:

- Case: Epoxy, Molded
- Weight: 0.4 Gram (Approximately)
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes:
260°C Max. for 10 Seconds
- Polarity: Cathode Indicated by Polarity Band

FAST RECOVERY RECTIFIERS 1.0 AMPERE, 50–600 VOLTS



MARKING DIAGRAM



A	=Assembly Location
1N493x	=Device Number x= 3, 4, 5, 6 or 7
YY	=Year
WW	=Work Week
▪	=Pb-Free Package

(Note: Microdot may be in either location)

ORDERING INFORMATION

See detailed ordering and shipping information on page 3 of this data sheet.

*For additional information on our Pb-Free strategy and soldering details, please download the **onsemi** Soldering and Mounting Techniques Reference Manual, SOLDERRM/D.

1N4933, 1N4934, 1N4935, 1N4936, 1N4937**MAXIMUM RATINGS** (Note 1)

Rating	Symbol	1N4933	1N4934	1N4935	1N4936	1N4937	Unit
†Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	V
†Non-Repetitive Peak Reverse Voltage RMS Reverse Voltage	V_{RSM} $V_{R(RMS)}$	75 35	150 70	250 140	450 280	650 420	V
†Average Rectified Forward Current (Single phase, resistive load, $T_A = 75^\circ\text{C}$) (Note 2)	I_O	1.0					A
†Non-Repetitive Peak Surge Current (Surge applied at rated load conditions)	I_{FSM}	30					A
Operating Junction Temperature Range Storage Temperature Range	T_J, T_{stg}	- 65 to +150					$^\circ\text{C}$

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

1. Ratings at 25°C ambient temperature unless otherwise specified.
2. Derate by 20% for capacitive loads.

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction-to-Ambient (Typical Printed Circuit Board Mounting)	$R_{\theta JA}$	65	$^\circ\text{C}/\text{W}$

ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	Min	Typ	Max	Unit
Instantaneous Forward Voltage ($I_F = 3.14$ Amp, $T_J = 150^\circ\text{C}$)	V_F	-	1.0	1.2	V
Forward Voltage ($I_F = 1.0$ Amp, $T_A = 25^\circ\text{C}$)	V_F	-	1.05	1.2	V
†Reverse Current (Rated DC Voltage) $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	I_R	-	1.0 50	5.0 100	μA

REVERSE RECOVERY CHARACTERISTICS†

Reverse Recovery Time ($I_F = 1.0$ Amp to $V_R = 30$ Vdc) ($I_{FM} = 15$ Amp, $di/dt = 10$ A/ μs)	t_{rr}	-	150 175	200 300	ns
Reverse Recovery Current ($I_F = 1.0$ Amp to $V_R = 30$ Vdc)	$I_{RM(REC)}$	-	1.0	2.0	A

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

†Indicates JEDEC Registered Data for 1N4933 Series.

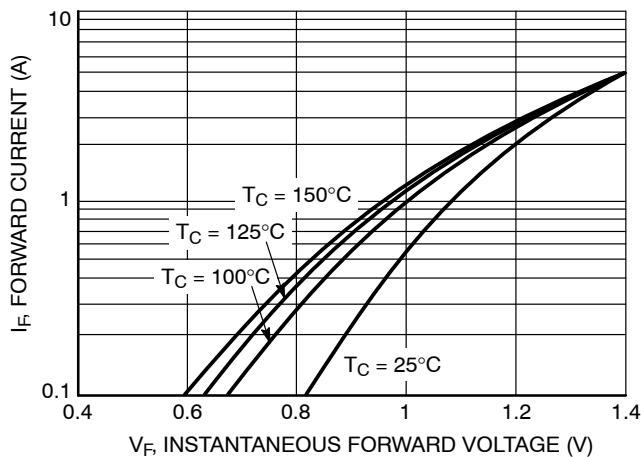


Figure 1. Typical Forward Voltage

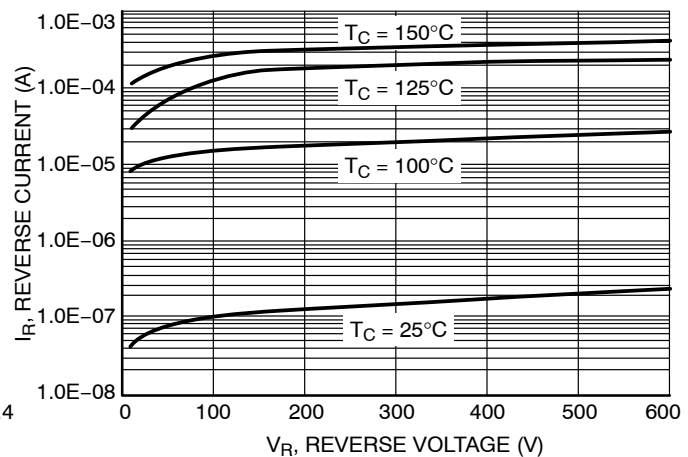
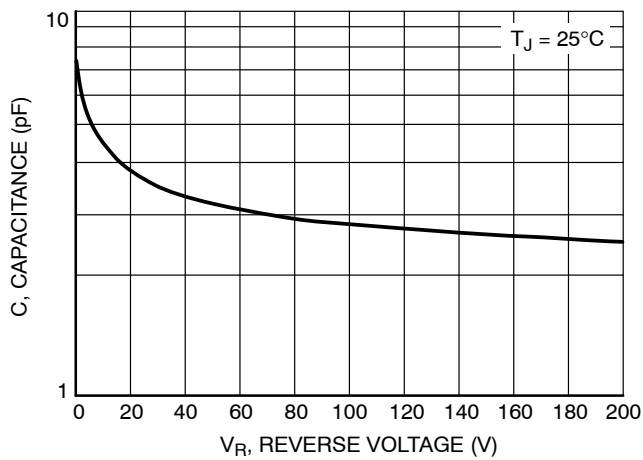
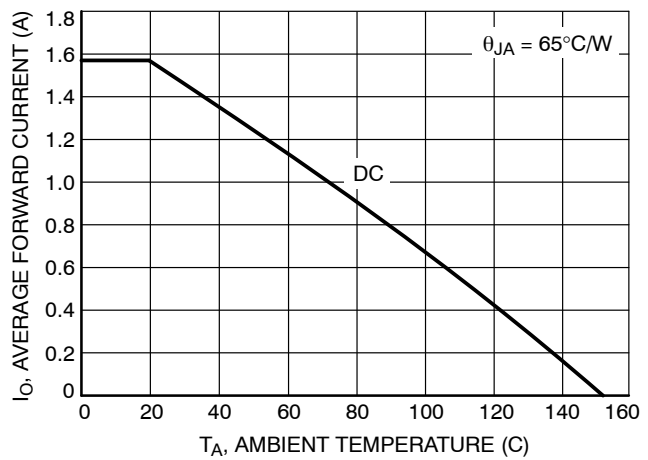


Figure 2. Typical Reverse Current

1N4933, 1N4934, 1N4935, 1N4936, 1N4937**Figure 3. Typical Capacitance****Figure 4. Current Derating****ORDERING INFORMATION**

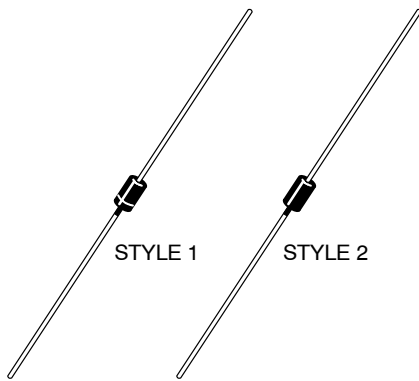
Device	Package	Shipping†
1N4933	Axial Lead*	1000 Units / Bag
1N4933G	Axial Lead*	1000 Units / Bag
1N4933RL	Axial Lead*	5000 / Tape & Reel
1N4933RLG	Axial Lead*	5000 / Tape & Reel
1N4934	Axial Lead*	1000 Units / Bag
1N4934G	Axial Lead*	1000 Units / Bag
1N4934RL	Axial Lead*	5000 / Tape & Reel
1N4934RLG	Axial Lead*	5000 / Tape & Reel
1N4935	Axial Lead*	1000 Units / Bag
1N4935G	Axial Lead*	1000 Units / Bag
1N4935RL	Axial Lead*	5000 / Tape & Reel
1N4935RLG	Axial Lead*	5000 / Tape & Reel
1N4936	Axial Lead*	1000 Units / Bag
1N4936G	Axial Lead*	1000 Units / Bag
1N4936RL	Axial Lead*	5000 / Tape & Reel
1N4936RLG	Axial Lead*	5000 / Tape & Reel
1N4937	Axial Lead*	1000 Units / Bag
1N4937G	Axial Lead*	1000 Units / Bag
1N4937RL	Axial Lead*	5000 / Tape & Reel
1N4937RLG	Axial Lead*	5000 / Tape & Reel

†For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, BRD8011/D.

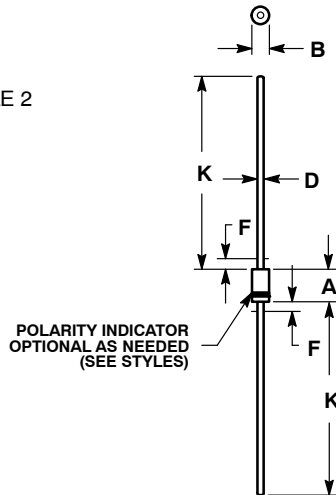
*This package is inherently Pb-Free.

DATE 15 FEB 2005

AXIAL LEAD
CASE 59-10
ISSUE U



SCALE 1:1



POLARITY INDICATOR
OPTIONAL AS NEEDED
(SEE STYLES)

STYLE 1:
1. CATHODE (POLARITY BAND)
2. ANODE

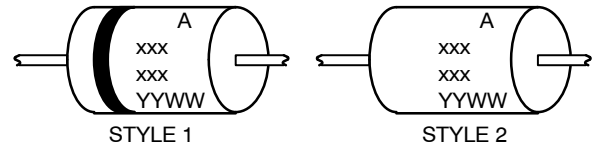
STYLE 2:
NO POLARITY

NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.
3. ALL RULES AND NOTES ASSOCIATED WITH JEDEC DO-41 OUTLINE SHALL APPLY.
4. POLARITY DENOTED BY CATHODE BAND.
5. LEAD DIAMETER NOT CONTROLLED WITHIN F DIMENSION.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.161	0.205	4.10	5.20
B	0.079	0.106	2.00	2.70
D	0.028	0.034	0.71	0.86
F	---	0.050	---	1.27
K	1.000	---	25.40	---

GENERIC MARKING DIAGRAM*



- xxx = Specific Device Code
- A = Assembly Location
- YY = Year
- WW = Work Week

*This information is generic. Please refer to device data sheet for actual part marking. Pb-Free indicator, "G" or microdot "µ", may or may not be present. Some products may not follow the Generic Marking.

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DESCRIPTION:	AXIAL LEAD	PAGE 1 OF 1

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onsemi Website: www.onsemi.com

ONLINE SUPPORT: www.onsemi.com/support

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