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### DESCRIPTION:

The CENTRAL SEMICONDUCTOR 1N4148 is a high speed switching diode manufactured in a DO-35 hermetically sealed glass case. The 1N4148 is a drop in replacement for the 1N914.

### MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	100	V
Peak Working Reverse Voltage	V <sub>RWM</sub>	75	V
Average Forward Current	IO	150	mA
DC Forward Current	١ <sub>F</sub>	200	mA
Peak Forward Surge Current, tp=1.0µs	IFSM	2.0	А
Power Dissipation	PD	500	mW
Operating and Storage Junction Temperature	т <sub>Ј</sub> , т <sub>stg</sub>	-65 to +200	°C

# **ELECTRICAL CHARACTERISTICS:** (T<sub>A</sub>=25°C unless otherwise noted)

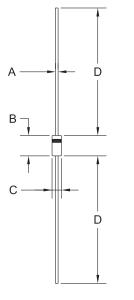
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I <sub>R</sub>	V <sub>R</sub> =20V		25	nA
BVR	I <sub>R</sub> =1.0mA	100		V
BVR	I <sub>R</sub> =100μΑ	75		V
VF	I <sub>F</sub> =10mA		1.0	V
Сј	V <sub>R</sub> =0, f=1.0MHz		4.0	pF
t <sub>rr</sub>	V <sub>R</sub> =6.0V, I <sub>F</sub> =10mA, I <sub>rr</sub> =1.0mA, R <sub>L</sub> =10	Ω	4.0	ns

R1 (23-November 2015)



1N4148

## DO-35 CASE - MECHANICAL OUTLINE



R1

DIMENSIONS							
DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
А	0.018	0.022	0.46	0.56			
В	0.120	0.200	3.05	5.08			
С	0.060	0.090	1.52	2.29			
D	1.000	-	25.40	-			

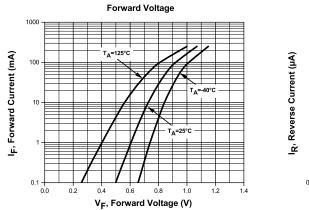
DO-35 (REV: R1)

R1 (23-November 2015)

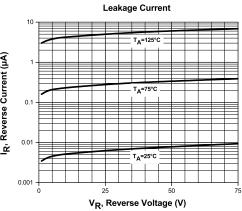
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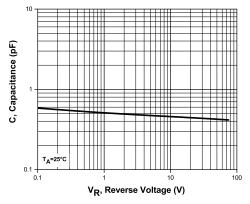
1N4148



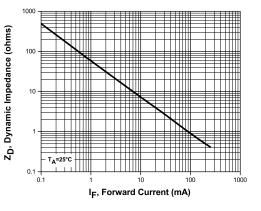
### TYPICAL ELECTRICAL CHARACTERISTICS



Capacitance



Forward Dynamic Impedance

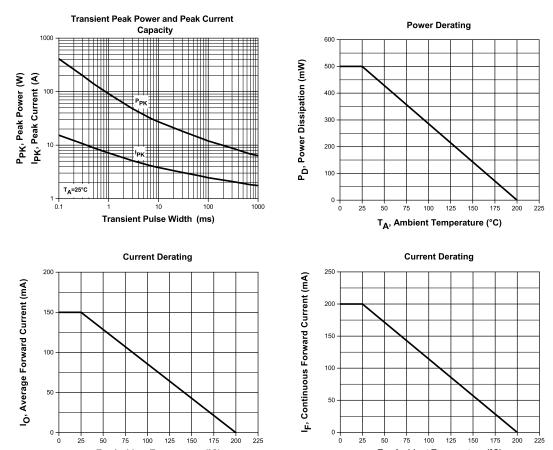


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## TYPICAL ELECTRICAL CHARACTERISTICS

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T<sub>A</sub>, Ambient Temperature (°C)

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T<sub>A</sub>, Ambient Temperature (°C)

# OUTSTANDING SUPPORT AND SUPERIOR SERVICES



### **PRODUCT SUPPORT**

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- · Consolidated shipping options

· Custom bar coding for shipments

**DESIGNER SUPPORT/SERVICES** 

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- · Environmental regulation compliance
- Customer specific screening
- · Up-screening capabilities

- · Custom product packing
- - · Special wafer diffusions
  - PbSn plating options
  - · Package details
  - · Application notes
  - · Application and design sample kits
  - · Custom product and package development

### CONTACT US

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