

# New Jersey Semi-Conductor Products, Inc.

20 STERN AVE.  
SPRINGFIELD, NEW JERSEY 07081  
U.S.A.

1N4614 THRU 1N4627  
250 mW LOW NOISE ZENER DIODE  
1.8 VOLTS THRU 6.2 VOLTS  
5% TOLERANCE

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## DESCRIPTION

## JEDEC DO-35 CASE

1N4614 Series Silicon Zener Diode is a high quality voltage regulator designed for low leakage, low current and low noise applications. Higher voltage devices are available in the 1N4099 series.

### ABSOLUTE MAXIMUM RATINGS

Power Dissipation (@  $T_A = 25^\circ\text{C}$ )  
Operating and Storage Temperature  
Tolerance (No Suffix)  
Tolerance "C Suffix"  
Tolerance "D Suffix"

### SYMBOL

$P_D$  250  
 $T_J, T_{STG}$  -65 to +200  
 $\pm 5$   
 $\pm 2$   
 $\pm 1$

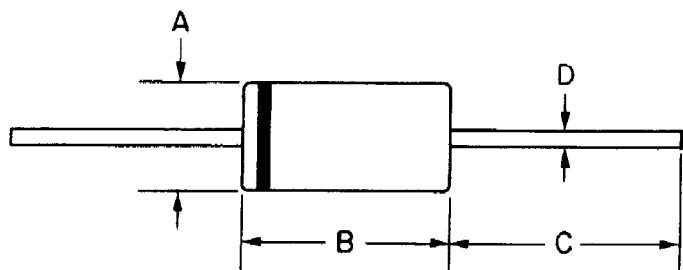
### UNIT

mW  
 $^\circ\text{C}$   
%  
%  
%

## ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ , $V_F = 1.0\text{V MAX @ } I_F = 200\text{ mA}$ ).

TYPE	Zener Voltage	Test Current $I_{ZT}$	Maximum Zener Impedance $Z_{ZT}@I_{ZT}$	Maximum Reverse Leakage Current		Maximum Zener Current $I_{ZM}$	Maximum Noise Density
	$V_Z@I_{ZT}$			$I_R@V_R$			$N_D@I_{ZT} = 250\mu\text{A}$
	Volts	$\mu\text{A}$	$\Omega$	$\mu\text{A}$	Volts	mA	$\mu\text{V}/\sqrt{\text{Hz}}$
1N4614	1.8	250	1200	7.5	1.0	120	1.0
1N4615	2.0	250	1250	5.0	1.0	110	1.0
1N4616	2.2	250	1300	4.0	1.0	100	1.0
1N4617	2.4	250	1400	2.0	1.0	95	1.0
1N4618	2.7	250	1500	1.0	1.0	90	1.0
1N4619	3.0	250	1600	0.8	1.0	85	1.0
1N4620	3.3	250	1650	7.5	1.5	80	1.0
1N4621	3.6	250	1700	7.5	2.0	75	1.0
1N4622	3.9	250	1650	5.0	2.0	70	1.0
1N4623	4.3	250	1600	4.0	2.0	65	1.0
1N4624	4.7	250	1550	10	3.0	60	1.0
1N4625	5.1	250	1500	10	3.0	55	2.0
1N4626	5.6	250	1400	10	4.0	50	4.0
1N4627	6.2	250	1200	10	5.0	45	5.0

R2



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	.060	.080	1.52	2.03
B	.140	.160	3.60	4.10
C	1.0	—	25.4	—
D	.018	.022	0.46	0.56

HERMETICALLY SEALED GLASS CASE WITH TINNED COPPER LEADS



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