

# New Jersey Semi-Conductor Products, Inc.

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## 1N3643 thru 1N3647 1N5181 thru 1N5184

### FEATURES

- Microminiature package.
- Voidless hermetically sealed glass package.
- Triple layer passivation.
- Metallurgically bonded.
- Ultra fast recovery.
- Lowest reverse leakage available.
- Lowest thermal resistance available.
- Maximum breakdown voltage per die.
- Absolute high voltage/high temperature stability.
- Meets or exceeds requirements of MIL-S-19500 and MIL-STD-750.

### ABSOLUTE MAXIMUM RATINGS

Operating Temperature:  $-65^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$ .  
 Storage Temperature:  $-65^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$ .

### SPECIFICATIONS

#### Electrical Characteristics

TYPE	PEAK INVERSE VOLTAGE (MIN.) PIV	AVERAGE RECTIFIED CURRENT $I_o$		FORWARD VOLTAGE (MAX.) $V_F$ (SEE NOTES)	REVERSE CURRENT (MAX.) $I_R$ @ PIV				SURGE CURRENT (MAX.) AMPS
		mA			$\mu\text{A}$				
		55°C	100°C		25°C	55°C	125°C	175°C	
1N3643	1000	250	150	5.0(1)	5	—	—	—	14
1N3644	1500	250	150	5.0(1)	5	—	—	—	14
1N3645	2000	250	150	5.0(1)	5	—	—	—	14
1N3646	2500	250	150	5.0(1)	5	—	—	—	14
1N3647	3000	250	150	5.0(1)	5	—	—	—	14
1N4254	1500	250	150	3.5(2)	1	—	20	—	10
1N4255	2000	250	150	3.5(2)	1	—	20	—	10
1N4256	2500	250	150	3.5(2)	1	—	20	—	10
1N4257	3000	250	150	3.5(2)	1	—	20	—	10
1N5181	4000	100	60	10(2)	—	5	—	1000	4
1N5182	5000	100	60	10(2)	—	5	—	1000	4
1N5183	7500	100	60	10(2)	—	5	—	1000	4
1N5184	10,000	100	60	10(2)	—	5	—	1000	4

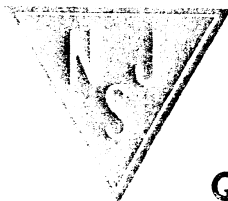
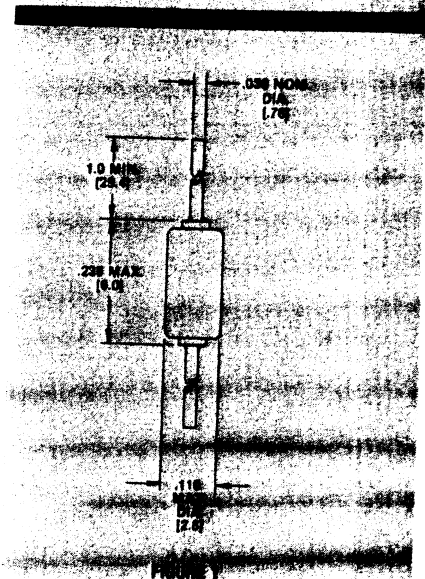
NOTE 1:  $V_F$  @ 250mA

NOTE 2:  $V_F$  @ 100mA

### MECHANICAL CHARACTERISTICS

Case: Hermetically sealed hard glass.  
 Lead Material: Tinned copper.  
 Marking: Body painted, alpha numeric.  
 Polarity: Cathode band.

### HIGH VOLTAGE RECTIFIERS



Quality Semi-Conductors