

**Microsemi Corp.**  
The diode experts



**1N3643 thru 1N3647  
1N4254 thru 1N4257  
1N5181 thru 1N5184**

SANTA ANA, CA

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(714) 979-8220

## FEATURES

- MICROMINIATURE PACKAGE
- VOIDLESS HERMETICALLY SEALED GLASS PACKAGE
- TRIPLE LAYER PASSIVATION
- METALLURGICALLY BONDED
- LOWEST REVERSE LEAKAGE AVAILABLE
- LOWEST THERMAL RESISTANCE AVAILABLE
- MAXIMUM BREAKDOWN VOLTAGE PER DIE
- ABSOLUTE HIGH VOLTAGE / HIGH TEMPERATURE STABILITY
- MEET OR EXCEED REQUIREMENTS OF MIL-S-19500/389 (IN 5181 — IN 5184).
- 1N3644 THRU 1N3647 JAN, JANTX TYPES AVAILABLE PER MIL-S-19500/279

## MAXIMUM RATINGS

Operating Temperature: -65°C to +175°C  
Storage Temperature: -65°C to +175°C

## ELECTRICAL CHARACTERISTICS

TYPE	WORKING PEAK REVERSE VOLTAGE V <sub>RWM</sub>	AVERAGE RECTIFIED CURRENT I <sub>O</sub>		FORWARD VOLTAGE (MAX.) V <sub>F</sub> (SEE NOTES)	REVERSE CURRENT (MAX.) I <sub>R</sub> @ V <sub>RWM</sub>				SURGE CURRENT (MAX.) AMPS	
		VOLTS	mA		VOLTS	μA				
			55°C			100°C	25°C	55°C		125°C
1N3643	1000	250	150	5.0(1)	5	—	—	—	14	
JAN 1N3644	1500	250	150	5.0(1)	5	—	—	—	14	
JAN 1N3645	2000	250	150	5.0(1)	5	—	—	—	14	
JAN 1N3646	2500	250	150	5.0(1)	5	—	—	—	14	
JAN 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<sub>F</sub> @ 250mA

NOTE 2: V<sub>F</sub> @ 100mA

## HIGH VOLTAGE RECTIFIERS

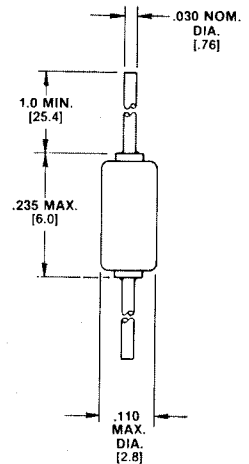


FIGURE 1  
Package S

## MECHANICAL CHARACTERISTICS

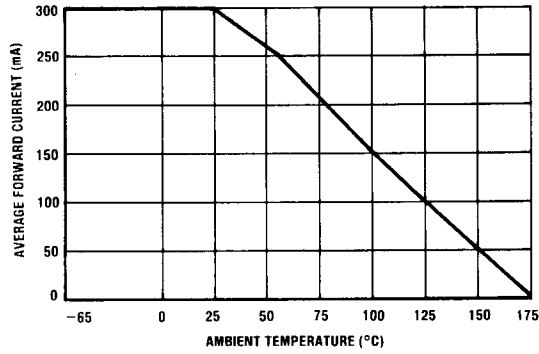
CASE: Hermetically sealed hard glass.

LEAD MATERIAL: Tinned copper.

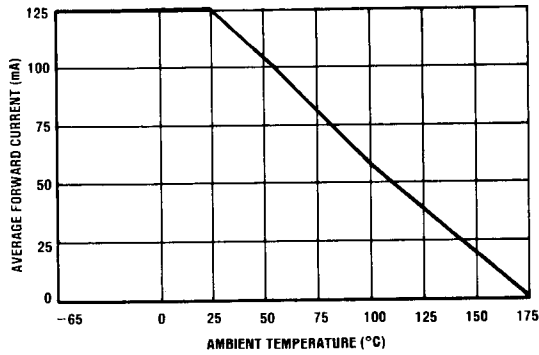
MARKING: Body painted, alpha numeric.

POLARITY: Cathode band.

**1N3643 thru 1N3647**  
**1N4254 thru 1N4257**  
**1N5181 thru 1N5184**



**FIGURE 2**  
**HVE/HVE 10-30/1N3643-47**



**FIGURE 3**  
**HVE/HVE 40-100/1N5181-84**