

# 1 Amp General Purpose

**1N5614**  
even #s thru  
**1N5622**

# Hard Glass Rectifiers

## Applications

For use in hostile environments like military, aerospace and medical.

Used where high voltage and small footprint are important.

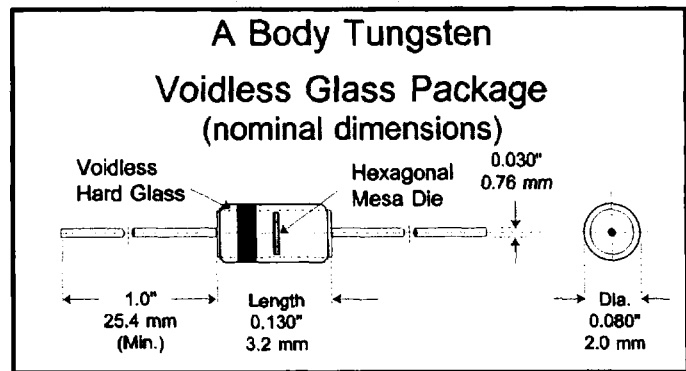
These rectifiers are ideal for use in clipping and steering applications.

*BKC can produce generic equivalents to JAN / TX / TXV and S level per MIL-S-19500 / 429 with internal source control drawings. Use HR, HRX, HRV or HRS suffixes for cost effective high reliability parts.*

## Voidless Package

## Features

- Six Sigma quality
- High surge capability
- Microminiature package
- Humidity proof hard glass
- Fast thermal response
- Metallurgically bonded
- Thermally matched system
- Zero solderability defects
- Sigma Bond™ plated contacts



Absolute Maximum Ratings	Symbol	Value	Unit
Average Forward Rectified Current at $T_{AMB} = 55^\circ\text{C}$	$I_{AV}$	1.0	Amp
Average Forward Rectified Current at $T_{AMB} = 100^\circ\text{C}$	$I_{AV}$	0.75	Amp
Junction Temperature Range	$T_J$	-65 to +175	$^\circ\text{C}$
Storage Temperature Range	$T_{ST}$	-65 to +200	$^\circ\text{C}$
Thermal Impedance per MIL-STD-750, method 3101	$Z_{\theta jx}$	4.5	$^\circ\text{C/W}$

### Characteristics at $T = 25^\circ\text{C}$

Type	Peak Inverse Voltage (MIN.) (PIV)	Breakdown Voltage (MIN.) @ 50 $\mu\text{A}$ ( $B_V$ )	Maximum Forward Voltage Drop ( $V_F$ ) @ $I_F = 3\text{A}$		Maximum Reverse Leakage Current ( $I_R$ ) @ PIV		Maximum Surge Current (NOTE 2) ( $I_{FSM}$ )	Maximum Reverse Recovery (NOTE 1) ( $t_r$ )
			(MIN.)	(MAX.)	25 $^\circ\text{C}$	150 $^\circ\text{C}$		
1N5614	200	220	0.8	1.3	1.0	25	30	2.0
1N5616	400	440	0.8	1.3	1.0	25	30	2.0
1N5618	600	660	0.8	1.3	1.0	25	30	2.0
1N5620	800	880	0.8	1.3	1.0	25	30	2.0
1N5622	1000	1100	0.8	1.3	1.0	25	30	2.0

Note 1:  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $t_r @ 0.25\text{A}$ .

Note 2:  $T_{AMB} = 100^\circ\text{C}$ ,  $F = 60\text{Hz}$ ,  $I_o = 750\text{mA}$ , 10 surges @ 8.3 mSec. @ 1 minute apart.

To buy high reliability parts, add the appropriate HR, HRX, HRV or HRS suffix to the above listed part numbers.



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