

# Silicon Diode

## **1N5618**

600V / 1A

# DATASHEET

OEM – Unitrode

Source: Unitrode Databook 1989-1990

# RECTIFIERS

Standard Recovery, 1 Amp  
Military Approved

1N5614, 1N5616, 1N5618,  
1N5620, 1N5622  
JAN, JANTX & JANTXV

**FEATURES**

- Qualified to MIL-S-19500/427
- PIV: to 1000V
- Controlled Avalanche

**DESCRIPTION**

This series of medium power general purpose rectifiers can be used in the most demanding military supplies. Rugged mechanical integrity and tight electrical parameters make them particularly useful.

**ABSOLUTE MAXIMUM RATINGS**

Peak Inverse Voltage	Type
200V	JAN, JANTX & JANTXV 1N5614
400V	JAN, JANTX & JANTXV 1N5616
600V	JAN, JANTX & JANTXV 1N5618
800V	JAN, JANTX & JANTXV 1N5620
1000V	JAN, JANTX & JANTXV 1N5622

Maximum Average D.C. Output Current

@  $T_A = 55^\circ\text{C}$  ..... 1.0A  
 @  $T_A = 100^\circ\text{C}$  ..... 0.75A

Non-Repetitive Sinusoidal

Surge Current (8.3ms) ..... 30A

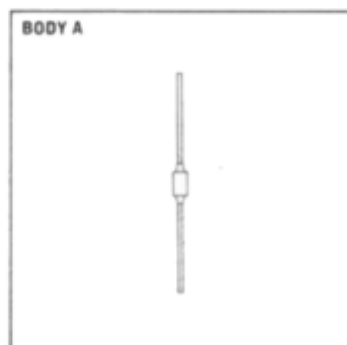
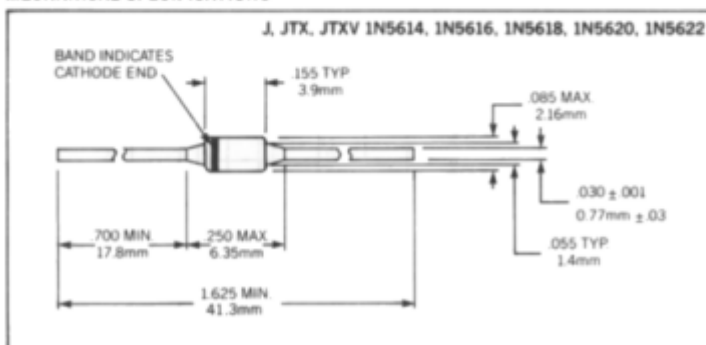
Operating Temperature Range .....  $-65^\circ\text{C}$  to  $+175^\circ\text{C}$

Storage Temperature Range .....  $-65^\circ\text{C}$  to  $+200^\circ\text{C}$

Thermal Resistance  $\theta_{JA}$  @  $L = \frac{3}{8}$ " .....  $38^\circ\text{C/W}$

See Lead Temperature Derating Curve

**MECHANICAL SPECIFICATIONS**



THESE DEVICES ALSO AVAILABLE IN SURFACE MOUNT PACKAGE. SEE SECTION 11.

JAN, JANTX, JANTXV 1N5614, 1N5616, 1N5618, 1N5620, 1N5622

ELECTRICAL SPECIFICATIONS (at 25°C unless noted)

Type	PIV	Minimum Reverse Breakdown Voltage @ 50 $\mu$ A	Forward Voltage		Maximum Reverse Current		Maximum Reverse Recovery Time*
			Min.	Max.	25°C	100°C	
J, JTX, JTXV 1N5614	200V	220V	0.8	1.3V(pk) @ 3.0A tp = 300 $\mu$ S	0.5 $\mu$ A	25 $\mu$ A	2.0 $\mu$ S
J, JTX, JTXV 1N5616	400V	440V					
J, JTX, JTXV 1N5618	600V	660V					
J, JTX, JTXV 1N5620	800V	880V					
J, JTX, JTXV 1N5622	1000V	1100V					

\*Measured in Circuit  $I_f = 1/2A$ ,  $I_R = 1.0A$ ,  $I_{REC} = 1/4A$

