

# Silicon Diode

## **1N4246**

400V / 1A

# DATASHEET

OEM – Unitrode

Source: Unitrode Databook 1989-1990

# RECTIFIERS

Military Approved, 1 Amp,  
General Purpose

1N4245-1N4249  
JAN, JANTX & JANTXV

**FEATURES**

- Qualified to MIL-S-19500/286
- Surge Rating: 25A
- PIV: to 1000 V
- Controlled Avalanche
- No Plastic, Epoxy, Silicone, Oxides, Gases or Solder are used

**DESCRIPTION**

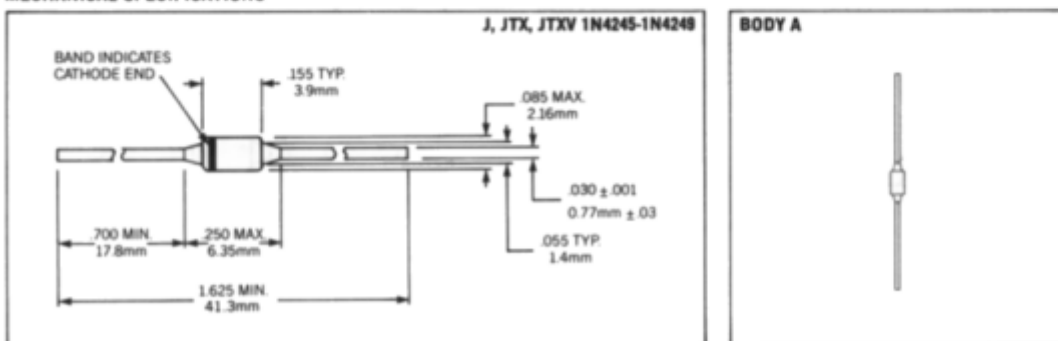
This series of general purpose power rectifiers are available as JAN, JANTX or JANTXV for many power supply applications.

**ABSOLUTE MAXIMUM RATINGS**

Maximum Reverse Voltage	Type
200V	JAN, JANTX, JANTXV 1N4245
400V	JAN, JANTX, JANTXV 1N4246
600V	JAN, JANTX, JANTXV 1N4247
800V	JAN, JANTX, JANTXV 1N4248
1000V	JAN, JANTX, JANTXV 1N4249

Maximum Average D.C. Output Current  
 @  $T_A = 100^\circ\text{C}$  ..... 1.0A  
 @  $T_A = 150^\circ\text{C}$  ..... 0.333A  
 Non-Repetitive Sinusoidal Surge Current ..... 25A  
 Operating Temperature Range .....  $-65^\circ\text{C}$  to  $+175^\circ\text{C}$   
 Storage Temperature Range .....  $-65^\circ\text{C}$  to  $+175^\circ\text{C}$   
 Thermal Resistance ..... See Lead Temperature Derating Curve

**MECHANICAL SPECIFICATIONS**



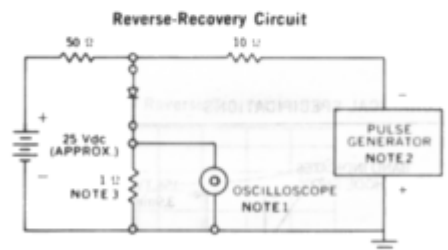
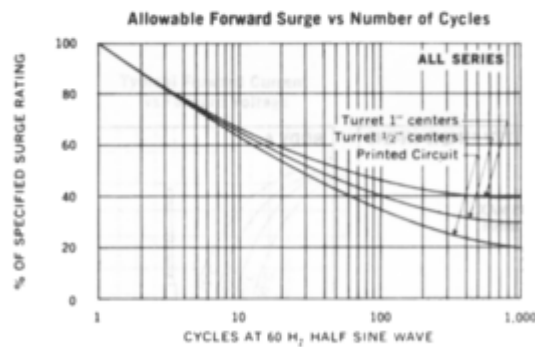
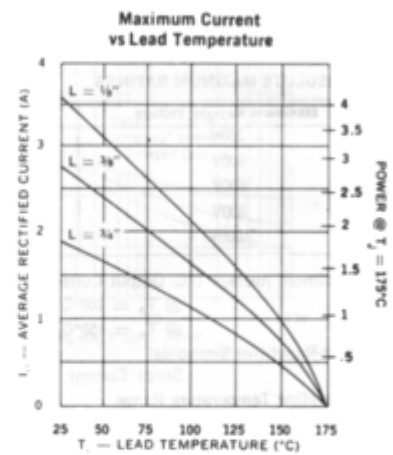
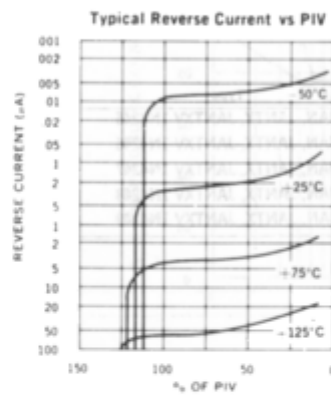
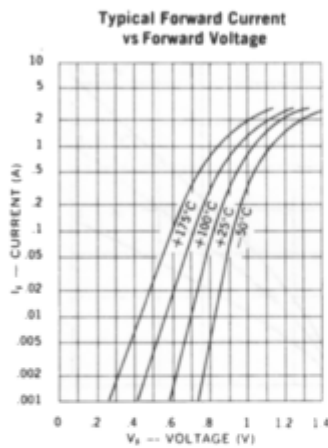
THESE DEVICES ALSO AVAILABLE IN SURFACE MOUNT PACKAGE. SEE SECTION 11.

JAN, JANTX, JANTXV 1N4245-1N4249

**ELECTRICAL SPECIFICATIONS (at 25°C unless noted)**

Type	PIV	Minimum Reverse Breakdown Voltage @ 100µA	Forward Voltage		Maximum Reverse Current		Maximum Reverse Recovery Time*
			Min.	Max.	25°C	150°C	
J, JTX, JTXV 1N4245	200V	240V	0.6V @ 3.0A(pk)	1.3V(pk)	1.0µA	150µA	5.0µs
J, JTX, JTXV 1N4246	400V	480V					
J, JTX, JTXV 1N4247	600V	720V					
J, JTX, JTXV 1N4248	800V	960V					
J, JTX, JTXV 1N4249	1000V	1150V					

\*Measured in circuit  $I_f = \frac{1}{2}I_A$ ,  $I_A = 1.0A$ ,  $I_{RRC} = \frac{1}{2}I_A$



- NOTES:**
- Oscilloscope: Rise time  $\leq 3ns$ ; input impedance  $\geq 50\Omega$ .
  - Pulse Generator: Rise time  $\leq 8ns$ ; source impedance  $10\Omega$ .
  - Current viewing resistor, non-inductive, coaxial recommended.