

Silicon Diode

1N4944

400V / 1A

DATASHEET

OEM – Unitrode

Source: Unitrode Databook 1989-1990

RECTIFIERS

Military Approved, 1 Amp,
Fast Recovery

JAN, JANTX, & JANTXV 1N4942
 JAN, JANTX, & JANTXV 1N4944
 JAN, JANTX, & JANTXV 1N4946

FEATURES

- Qualified to MIL-S-19500/359
- Surge Rating: 15A
- PIV: to 600V
- Controlled Avalanche

DESCRIPTION

These fast recovery rectifiers are suitable for use as power devices for many applications. Devices are available as JAN, JANTX or JANTXV.

ABSOLUTE MAXIMUM RATINGS

Maximum Reverse Voltage	Type
200V	JAN, JANTX, & JANTXV 1N4942
400V	JAN, JANTX, & JANTXV 1N4944
600V	JAN, JANTX, & JANTXV 1N4946

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

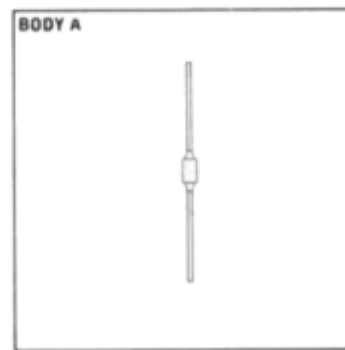
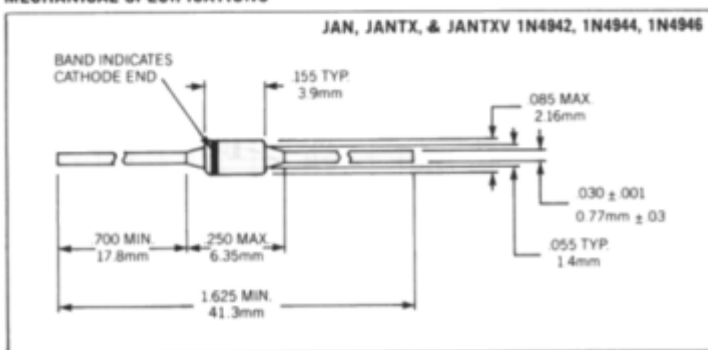
Surge Current (8.3ms) 15A

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

Storage Temperature Range -65°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 1N4942, 1N4944, 1N4946

ELECTRICAL SPECIFICATIONS (at 25°C unless noted)

Type	Peak Inverse Voltage	Minimum Reverse Breakdown Voltage @ 50 μ A	Forward Voltage		Maximum Reverse Current		Maximum Reverse Recovery Time*	Capacitance @ V _r = 12V f = 1MHz
			Min.	Max.	25°C	150°C		
J, JTX, JTXV 1N4942	200V	220V	0.6V	1.3Vdc	1.0 μ A	200 μ A	150ns	45pf
J, JTX, JTXV 1N4944	400V	440V	@ 1 Adc				150ns	35pf
J, JTX, JTXV 1N4946	600V	660V					250ns	25pf

*Measured in circuit I_f = 1/2A, I_r = 1.0A, I_{RRC} = 1/4A

