

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

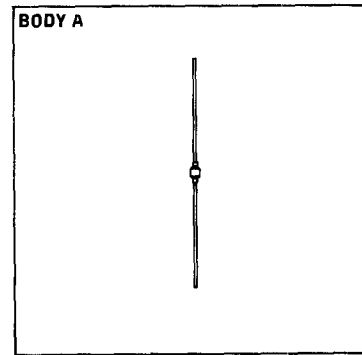
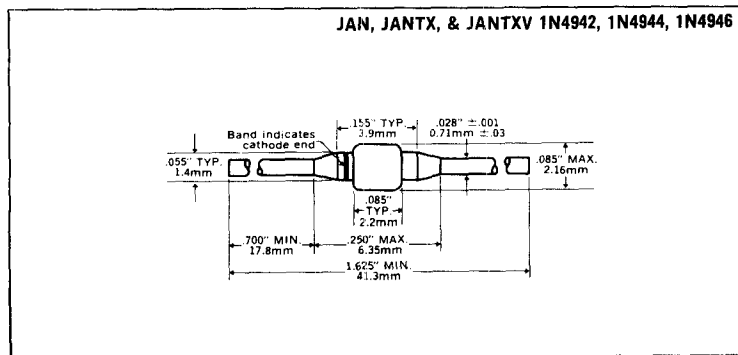
Surge Current (8.3ms) 15A

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

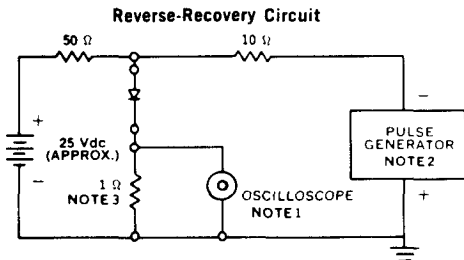
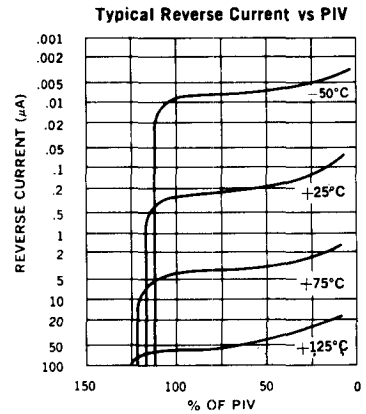
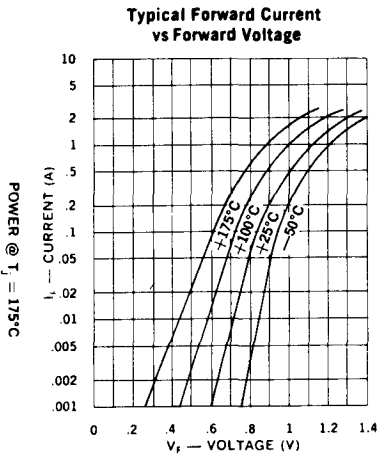
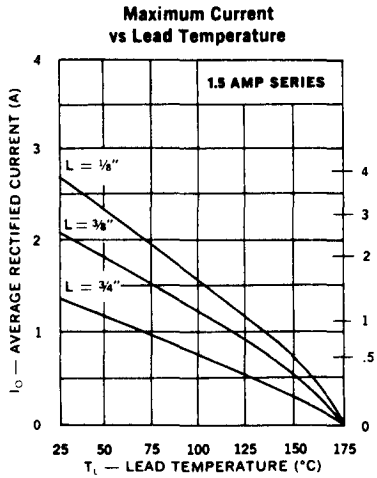
MECHANICAL SPECIFICATIONS



ELECTRICAL SPECIFICATIONS (at 25°C unless noted)

Type	Peak Inverse Voltage	Minimum Reverse Breakdown Voltage @ 50µA	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	1.0µA	200µA	150ns	45pf
J, JTX, JTXV 1N4944	400V	440V	@ 1 Adc		1.0µA	200µA	150ns	35pf
J, JTX, JTXV 1N4946	600V	660V					250ns	25pf

*Measured in circuit I_F = 1/2A, I_R = 1.0A, I_{REC} = 1/4A



- NOTES:**
- Oscilloscope: Rise time < 3ns; input impedance = 50Ω.
 - Pulse Generator: Rise time < 8ns; source impedance 10Ω.
 - Current viewing resistor, non-inductive, coaxial recommended.

