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# RECTIFIERS

## Fast Recovery, 1 Amp

1N5615, 1N5617, 1N5619

### FEATURES

- Qualified to MIL-S-19500/429
- PIV: to 600V
- Controlled Avalanche

### DESCRIPTION

This series of military approved rectifiers is useful in many military applications where fast recovery and medium power are required. The 100% screening requirement in the "TX" version combined with the unique Unitrode construction assures the highest degree of reliability.

### ABSOLUTE MAXIMUM RATINGS

Peak Inverse Voltage	Type
200V	1N5615
400V	1N5617
600V	1N5619

### 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) ..... 25A

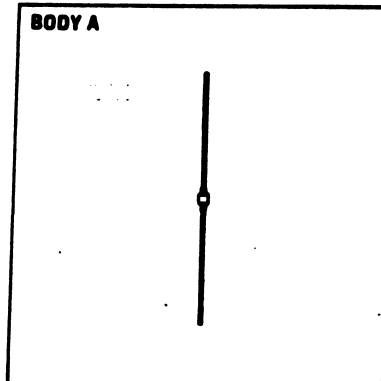
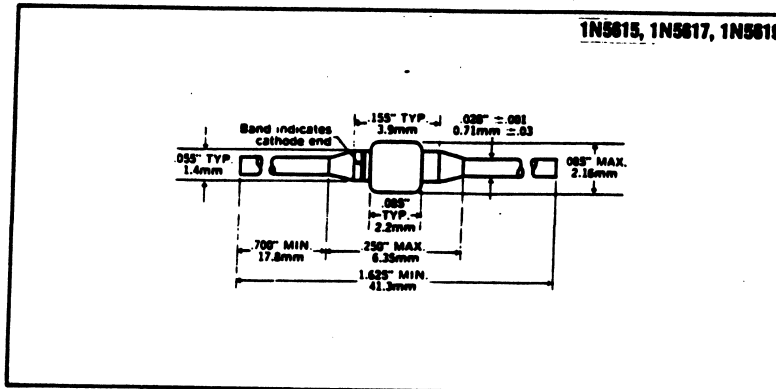
Operating Temperature Range .....  $-65^\circ\text{C}$  to  $+175^\circ\text{C}$

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

Thermal Resistance  $\theta_{JA}$  .....  $38^\circ\text{C/W}$

See Lead Temperature Derating Curve

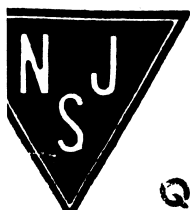
### MECHANICAL SPECIFICATIONS



1N5615, 1N5617, 1N5619

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

Type	PIV	Minimum Reverse Breakdown Voltage @ 50µA	Forward Voltage		Maximum Reverse Current		Maximum Reverse Recovery Time*	Capacitance @ $V_r = 12V$ , $f = 1MHz$
			Min.	Max.	25°C	100°C		
J, JTX, JTXV 1N5615	200V	220V	0.8V	1.6V (pk)	0.5µA	25µA	150ns	45pf
J, JTX, JTXV 1N5617	400V	440V	@ 3.0 Adc tp = 300µs		0.5µA	25µA	150ns	35pf
J, JTX, JTXV 1N5619	600V	660V					250ns	25pf



Quality: