



High-reliability discrete products  
and engineering services since 1977

# UTX3105-UTX3120, UTX4105-UTX4120

## SUPER FAST RECOVERY RECTIFIERS

### FEATURES:

- Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number
- Available Non-RoHS (standard) or RoHS compliant (add PBF suffix)

### MAXIMUM RATINGS

| Characteristic   | 3 amp series   | 4 amp series |
|--|----------------|--------------|
| Maximum average DC output current<br>@ T <sub>A</sub> = 25°C | 3.0A           | 4.0A         |
| @ T <sub>A</sub> = 100°C                                     | 1.5A           | 2.0A         |
| Non-repetitive sinusoidal<br>Surge current (8.3ms)           | 60A            | 80A          |
| Operating temperature range                                  | -195 to +175°C |              |
| Storage temperature range                                    | -195 to +200°C |              |

### ELECTRICAL CHARACTERISTICS

| Part number | Peak inverse voltage | Maximum forward voltage drop | Maximum leakage current @ PIV |       | Maximum reverse recovery time * |
|-------------|----------------------|------------------------------|-------------------------------|-------|---------------------------------|
|             |                      |                              | 25°C                          | 100°C |                                 |
| UTX4105     | 50V                  | 1V @ 3 Adc                   | 5µA                           | 75µA  | 100ns                           |
| UTX4110     | 100V                 |                              |                               |       |                                 |
| UTX4115     | 150V                 |                              |                               |       |                                 |
| UTX4120     | 200V                 |                              |                               |       |                                 |
| UTX3105     | 50V                  | 1V @ 2 Adc                   | 5µA                           | 75µA  | 100ns                           |
| UTX3110     | 100V                 |                              |                               |       |                                 |
| UTX3115     | 150V                 |                              |                               |       |                                 |
| UTX3120     | 200V                 |                              |                               |       |                                 |

Recovery time is measured form 1A to 1A recovering to 0.5A.



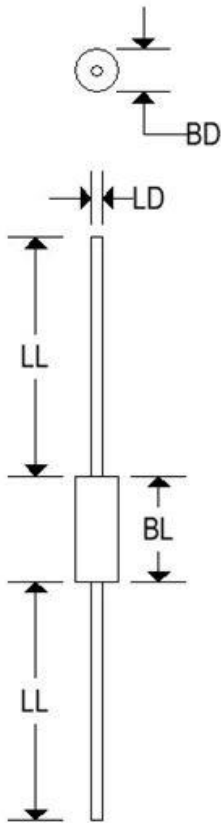
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### MECHANICAL CHARACTERISTICS

|                 |                             |
|-----------------|-----------------------------|
| <b>Case</b>     | Digi B                      |
| <b>Marking</b>  | Body painted, alpha-numeric |
| <b>Polarity</b> | Cathode band                |



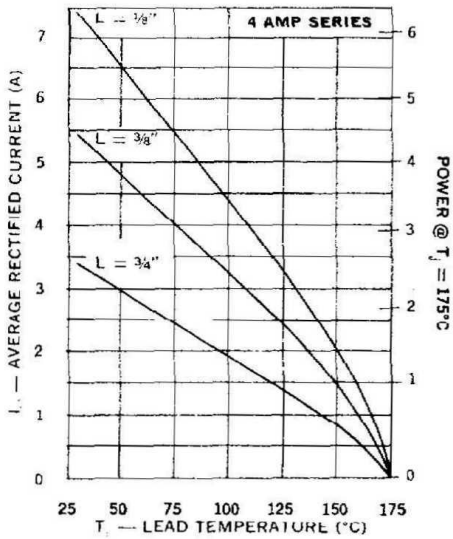
|    | Digi B |       |             |        |
|----|--------|-------|-------------|--------|
|    | Inches |       | Millimeters |        |
|    | Min    | Max   | Min         | Max    |
| BD | 0.115  | 0.142 | 2.921       | 3.607  |
| BL | 0.130  | 0.260 | 3.302       | 6.604  |
| LD | 0.036  | 0.042 | 0.914       | 1.067  |
| LL | 1.000  | 1.500 | 25.400      | 38.100 |

BL includes slugs and uncontrolled area of the leads

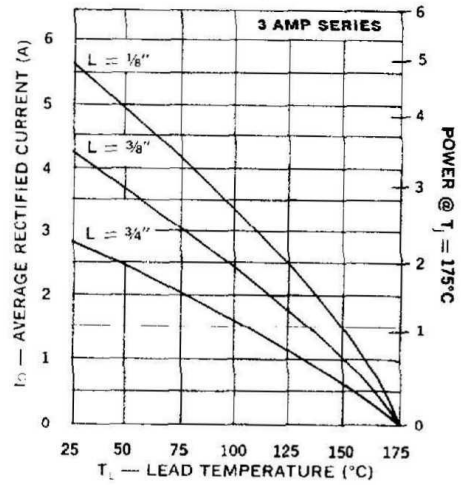
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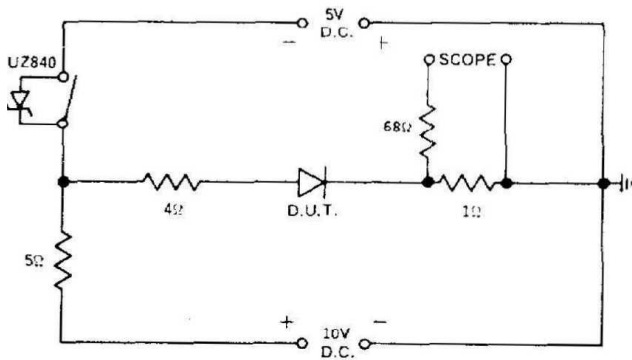
Maximum Current  
vs Lead Temperature



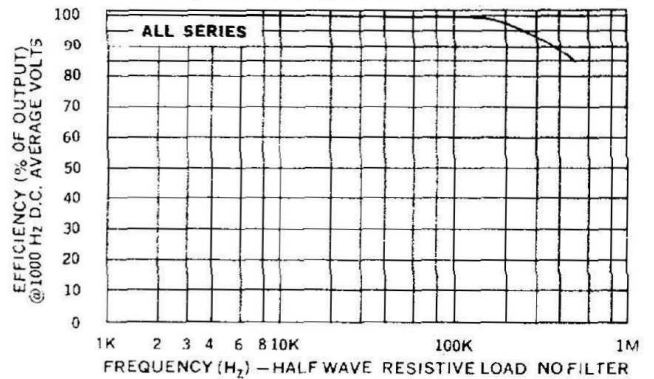
Maximum Current  
vs Lead Temperature



Reverse Recovery Circuit



Efficiency vs Frequency at Rated Current (Sine Wave)



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