



High-reliability discrete products  
and engineering services since 1977

# UTR10-UTR60, UTR01-UTR61, UTR02-UTR62

## FAST RECOVERY RECTIFIERS

### FEATURES

- Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.
- Available as non-RoHS (Sn/Pb plating), standard, and as RoHS by adding "-PBF" suffix.

### MAXIMUM RATINGS

Characteristic	½ amp series	1 amp series	2 amp series
Maximum average DC output current @ T <sub>A</sub> = 25°C	0.5A	1.0A	2.0A
@ T <sub>A</sub> = 100°C	0.25A	0.5A	1.0A
Non-repetitive sinusoidal Surge current (8.3ms)	15A	20A	25A
Operating temperature range	-195 to +175°C		
Storage temperature range	-195 to +200°C		

### ELECTRICAL CHARACTERISTICS @ 25°C unless otherwise noted

Part number	Peak inverse voltage	Maximum forward voltage drop	Maximum leakage current @ PIV		Maximum reverse recovery time *	Maximum junction capacitance @ 25°C				
			25°C	100°C		0V	-10V			
UTR02	50V	1.1V @ 1000mA	3µA	100µA	250ns	150pf	60pF			
UTR12	100V					100pf	40pF			
UTR22	200V					80pf	32pF			
UTR32	300V				300ns	60pf	24pF	70pf	28pF	
UTR42	400V							60pf	24pF	
UTR52	500V							400ns	50pf	20pF
UTR62	600V								40pf	16pF
UTR01	50V	1.1V @ 500mA	3µA	100µA	250ns	150pf	60pF			
UTR11	100V					100pf	40pF			
UTR21	200V					80pf	32pF			
UTR31	300V				300ns	60pf	24pF	70pf	28pF	
UTR41	400V							60pf	24pF	
UTR51	500V							400ns	50pf	20pF
UTR61	600V								40pf	16pF
UTR10	100V	1.1V @ 200mA	3µA	100µA	250ns	100pf	40pF			
UTR20	200V					80pf	32pF			
UTR30	300V				300ns	70pf	28pF	70pf	28pF	
UTR40	400V							60pf	24pF	
UTR50	500V				400ns	50pf	20pF			
UTR60	600V					40pf	16pF			



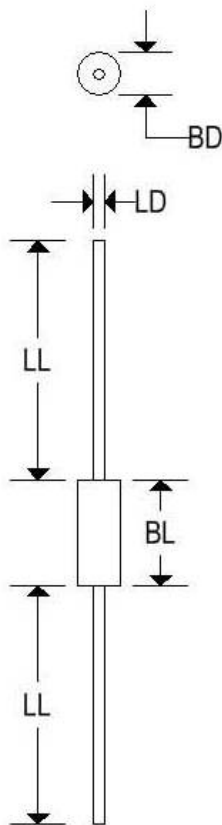
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## MECHANICAL CHARACTERISTICS

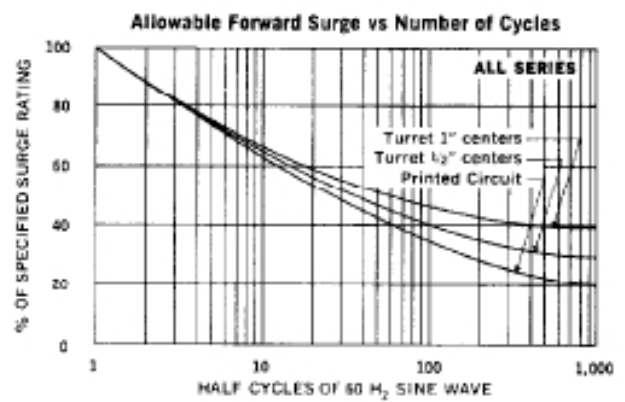
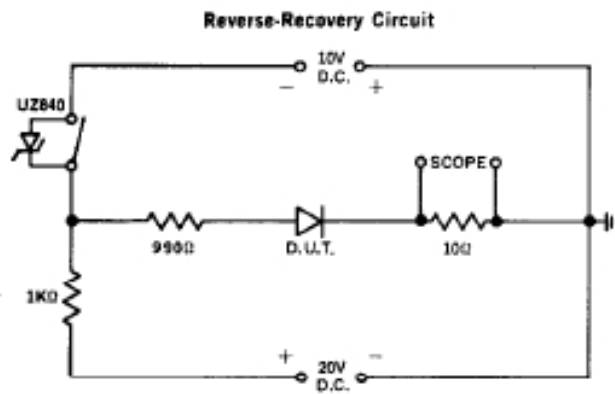
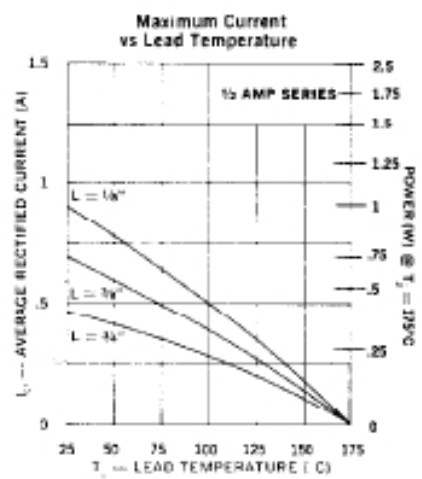
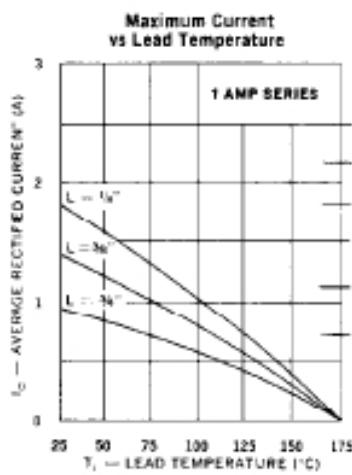
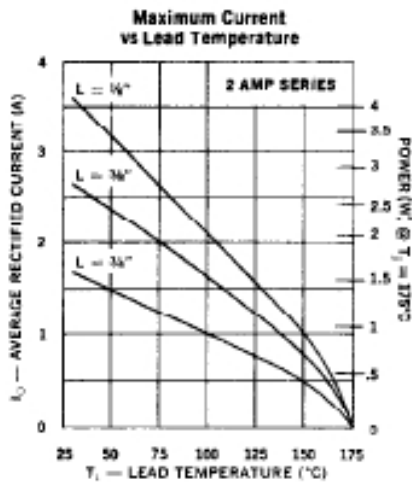
<b>Case</b>	Digi A
<b>Marking</b>	Body painted, alpha-numeric
<b>Polarity</b>	Cathode band



	Digi A			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	-	0.095	-	2.413
BL	-	0.180	-	4.572
LD	0.028	0.032	0.711	0.813
LL	0.700	-	17.800	-

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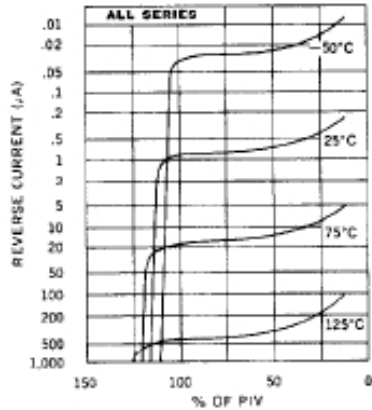


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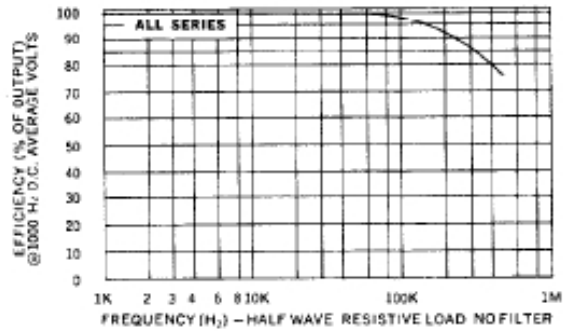
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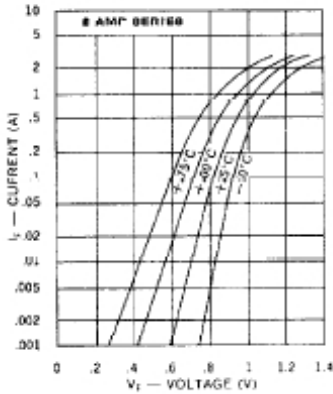
Typical Reverse Current vs PIV



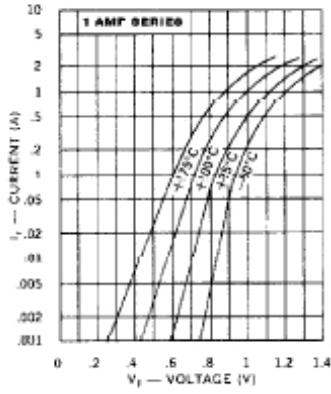
Efficiency vs Frequency at Rated Current (Sine Wave)



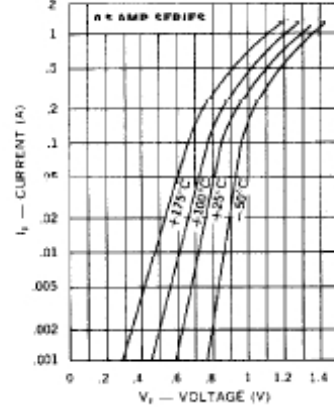
Typical Forward Current vs Forward Voltage



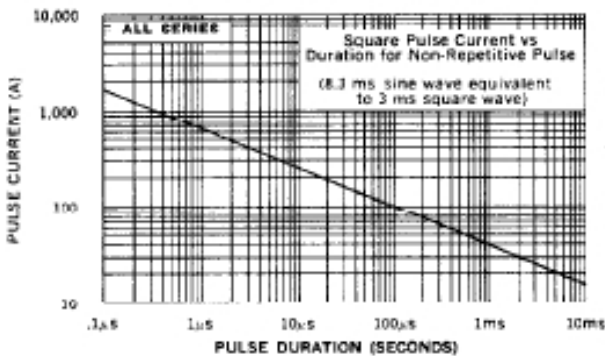
Typical Forward Current vs Forward Voltage



Typical Forward Current vs Forward Voltage



Forward Pulse Current vs Pulse Duration



Reverse Pulse Power vs Pulse Duration

