

RECTIFIERS

Super-Fast Recovery, 1 Amp and 2 Amp

UTX105-UTX125
UTX205-UTX225

2

FEATURES

- Continuous Rating: to 2A
- Controlled Avalanche
- Surge: to 25A
- Recovery Time less than 75ns
- Miniature Package

DESCRIPTION

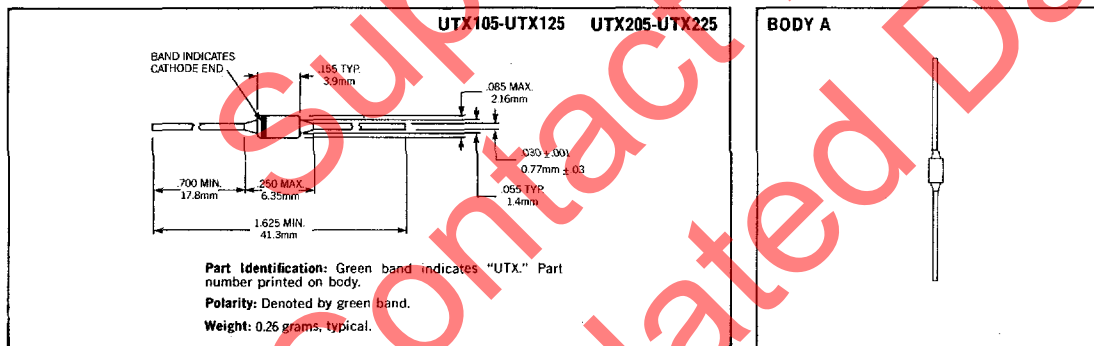
These miniature super-fast recovery rectifiers permit operation at full power at frequencies as high as 100kHz square wave. They may be used as half wave rectifiers or as legs of a bridge.

ABSOLUTE MAXIMUM RATINGS

Peak Inverse Voltage	1 Amp Series	2 Amp Series
50V	UTX105	UTX205
100V	UTX110	UTX210
150V	UTX115	UTX215
200V	UTX120	UTX220
250V	UTX125	UTX225

Maximum Average D.C. Output Current	1 AMP SERIES	2 AMP SERIES
@ $T_A = 25^\circ\text{C}$	1.0A	2.0A
@ $T_A = 100^\circ\text{C}$	0.5A	1.0A
Non-Repetitive Sinusoidal		
Surge Current (8.3ms)	20A	25A
Operating Temperature Range	-195°C to +175°C	
Storage Temperature Range	-195°C to +200°C	
Thermal Resistance	See Lead Temperature Derating Curve	

MECHANICAL SPECIFICATIONS



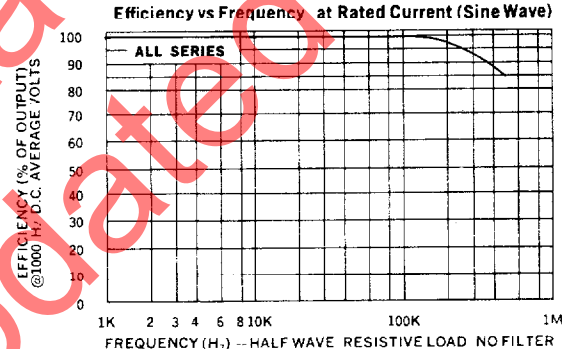
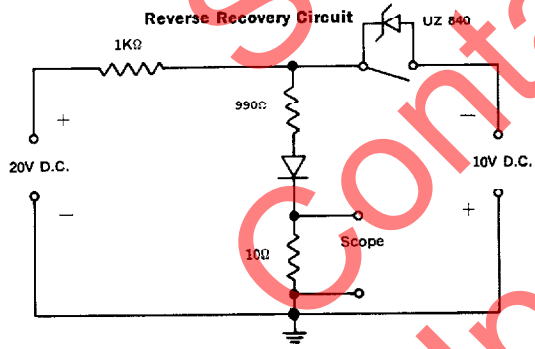
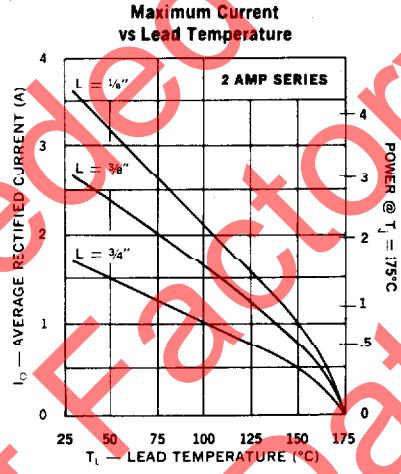
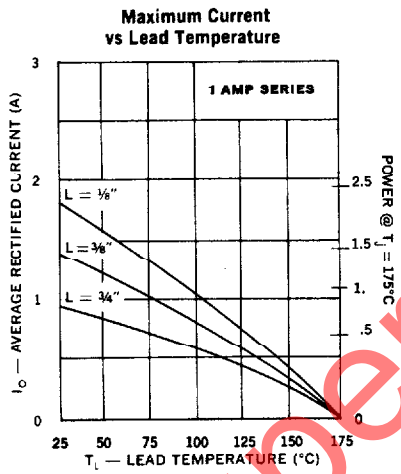
Microsemi Corp.
Watertown
The diode experts

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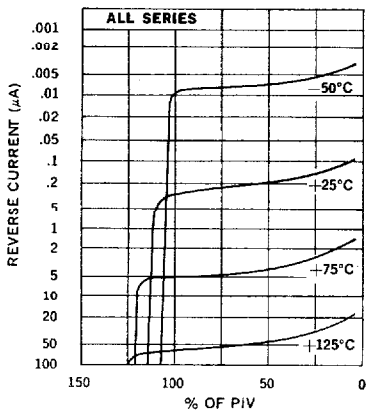
ELECTRICAL SPECIFICATIONS (at 25°C unless noted)

Type	PIV	Maximum Voltage Forward Drop	Leakage Current @ PIV		Max. Reverse Recovery Time*
			25°C	100°C	
UTX 205 UTX 210 UTX 215 UTX 220 UTX 225	50V 100V 150V 200V 250V	1.0V @ 1 Adc	3μA	50μA	75ns
UTX 105 UTX 110 UTX 115 UTX 120 UTX 125	50V 100V 150V 200V 250V	1.0V @ 0.5 Adc	3μA	50μA	75ns

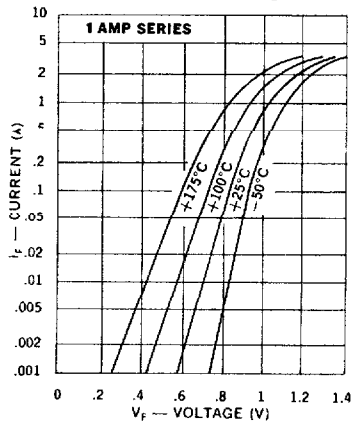
*Recovery time is measured from 10.0mA to 10.0mA recovery to 5.0mA.



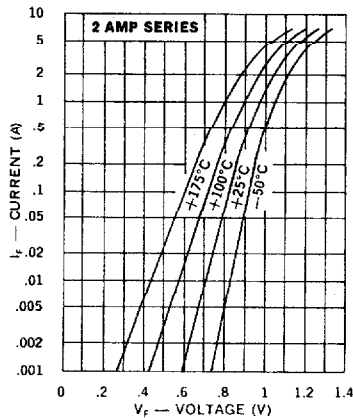
Typical Leakage Current vs. PIV



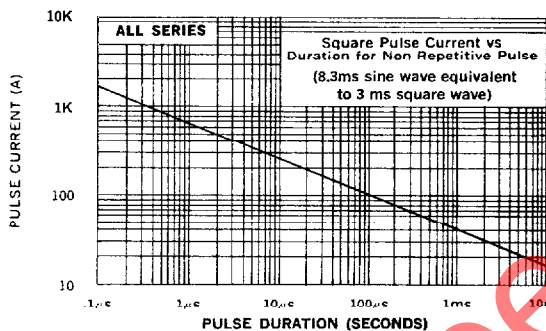
Typical Forward Current vs Forward Voltage



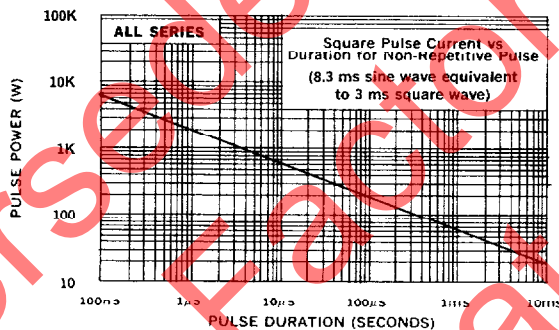
Typical Forward Current vs Forward Voltage



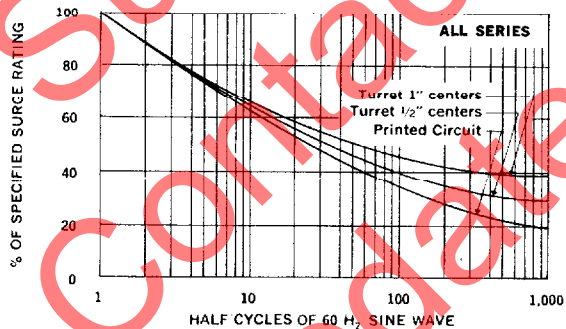
Forward Pulse Current vs Pulse Duration



Reverse Pulse Power vs Pulse Duration



Allowable Forward Surge vs Number of Cycles



for Updated Data Sheet