

RECTIFIERS

Standard Recovery, 2 Amp to 4 Amp

UT2005-UT2060
UT3005-UT3060
UT4005-UT4060

FEATURES

- Continuous Rating: to 4A
- Controlled Avalanche
- Surge Rating: to 100A
- PIV: to 600 V
- Miniature Package

DESCRIPTION

High average power and surge capability make these series of devices attractive in many high-rel applications.

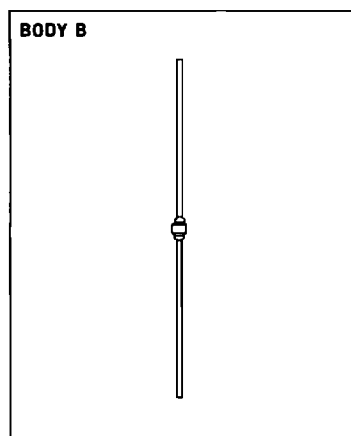
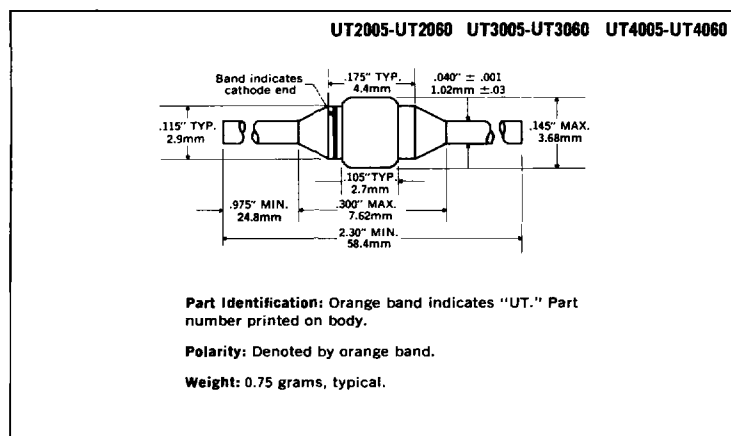
All Unitrode rectifiers have a sleeve of pure hard glass fused to the silicon junction. Since the silicon sees only this glass, electrical characteristics are permanently stable. This voidless, monolithic package is totally unaffected by the most severe moisture or temperature testing.

ABSOLUTE MAXIMUM RATINGS

Peak Inverse Voltage	2 Amp Series	3 Amp Series	4 Amp Series
50V	UT2005	UT3005	UT4005
100V	UT2010	UT3010	UT4010
200V	UT2020	UT3020	UT4020
400V	UT2040	UT3040	UT4040
600V	UT2060	UT3060	UT4060

	2 AMP SERIES	3 AMP SERIES	4 AMP SERIES
Maximum Average D.C. Output Current			
@ $T_A = 25^\circ\text{C}$	2.0A	3.0A	4.0A
@ $T_A = 100^\circ\text{C}$	1.0A	1.5A	2.0A
Non-Repetitive Sinusoidal			
Surge Current (8.3ms)	60A	80A	100A
Operating Temperature Range	-195°C to +175°C		
Storage Temperature Range	-195°C to +200°C		
Thermal Resistance	See lead temperature derating curve		

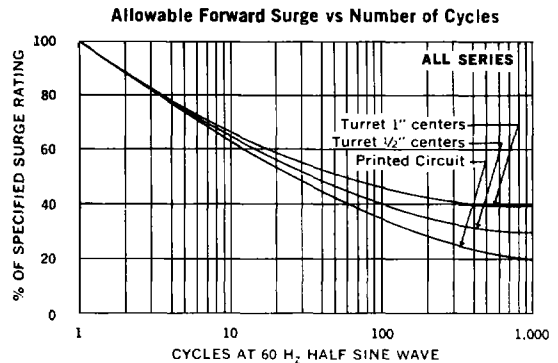
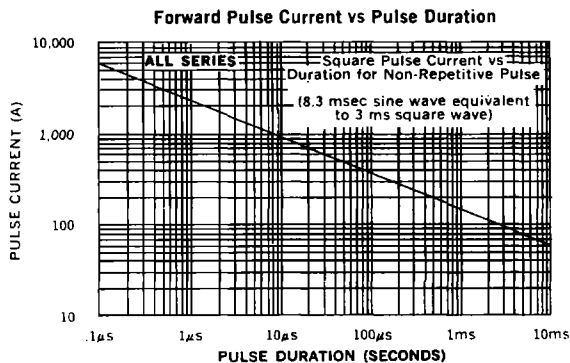
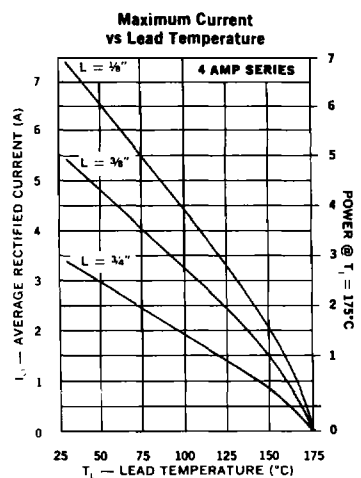
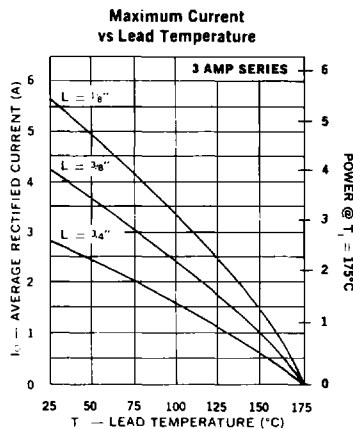
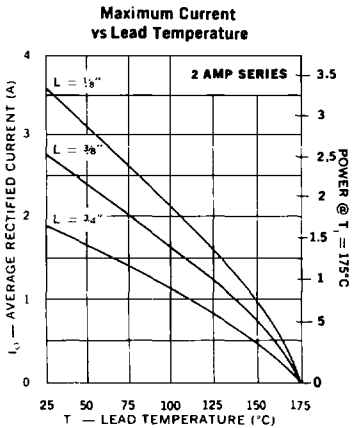
MECHANICAL SPECIFICATIONS



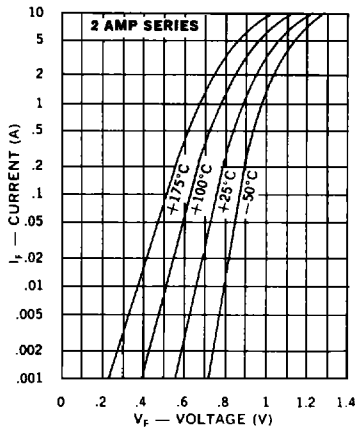
THESE DEVICES ALSO AVAILABLE IN SURFACE MOUNT PACKAGE. SEE SECTION 11.

ELECTRICAL SPECIFICATIONS (at 25°C unless noted)

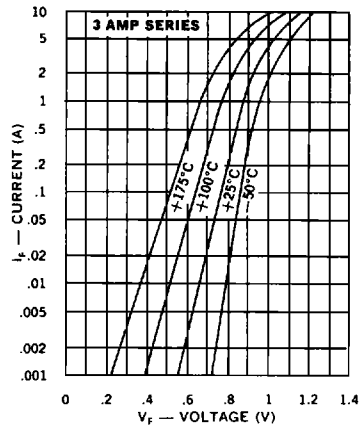
Type	PIV	Maximum Forward Voltage Drop	Maximum Leakage Current @ PIV	
			25°C	100°C
UT4005 UT4010 UT4020 UT4040 UT4060	50V 100V 200V 400V 600V	1V @ 3A	5 μ A	100 μ A
UT3005 UT3010 UT3020 UT3040 UT3060	50V 100V 200V 400V 600V	1V @ 2A	5 μ A	100 μ A
UT2005 UT2010 UT2020 UT2040 UT2060	50V 100V 200V 400V 600V	1V @ 1A	5 μ A	100 μ A



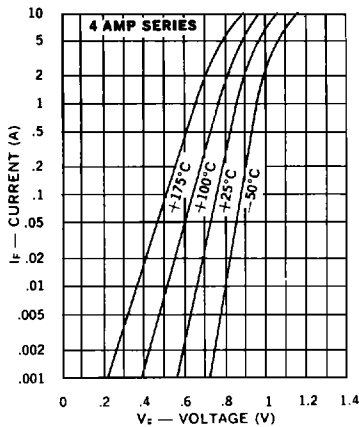
Typical Forward Current
vs Forward Voltage



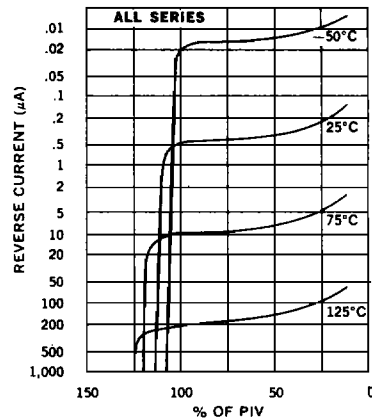
Typical Forward Current
vs Forward Voltage



Typical Forward Current
vs Forward Voltage



Typical Reverse Current vs PIV



Reverse Pulse Power vs Pulse Duration

