

APÉNDICE F

U1520: Ultra fast rectifier Diode



U15A05 Thru U15A20

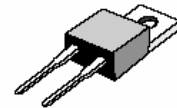
Ultra Fast Recovery Rectifier Diodes

... Designed for use in switching power supplies, inverters and as free wheeling diodes. These state-of-the-art devices have the following features:

- * High Surge Capacity
- * Low Power Loss, High efficiency
- * Glass Passivated chip junctions
- * 150 °C Operating Junction Temperature
- * Low Stored Charge Majority Carrier Conduction
- * Low Forward Voltage , High Current Capability
- * High-Switching Speed 35 Nanosecond Recovery Time
- * Plastic Material used Carries Underwriters Laboratory Flammability Classification 94V-0

ULTRA FAST
RECTIFIERS

15 AMPERES
50 – 200 VOLTS



TO-220A

MAXIMUM RATINGS

Characteristic	Symbol	U15A				Unit
		05	10	15	20	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	150	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	105	140	V
Average Rectifier Forward Current	$I_{F(AV)}$	15				A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfwave, single phase, 60Hz)	I_{FSM}	250				A
Operating and Storage Junction Temperature Range	T_J, T_{stg}	- 65 to + 150				°C

ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	U15A				Unit
		05	10	15	20	
Maximum Instantaneous Forward Voltage ($I_F=15$ Amp, $T_C = 25$ °C) ($I_F=15$ Amp, $T_C = 100$ °C)	V_F	0.975 0.870				V
Maximum Instantaneous Reverse Current (Rated DC Voltage, $T_C = 25$ °C) (Rated DC Voltage, $T_C = 100$ °C)	I_R	10 700				uA
Reverse Recovery Time ($I_F = 0.5$ A, $I_R = 1.0$ A , $I_{rr} = 0.25$ A)	T_{rr}	35				ns
Typical Junction Capacitance (Reverse Voltage of 4 volts & f=1 MHz)	C_P	250				pF

