

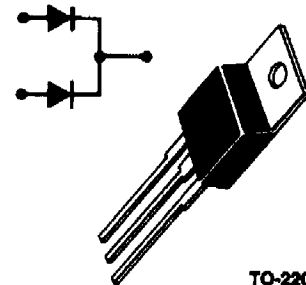
SWITCHMODE POWER RECTIFIERS

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

- Ultrafast 35 and 60 Nanosecond Recovery Times
- 175°C Operating Junction Temperature
- Popular TO-220 Package
- Epoxy meets UL94, V₀ @ 1/8"
- High Temperature Glass Passivated Junction
- High Voltage Capability to 600 Volts
- Low Leakage Specified @ 150°C Case Temperature
- Current Derating @ Both Case and Ambient Temperatures

ULTRAFAST RECTIFIERS

8 AMPERES
50-600 VOLTS



TO-220AB
PLASTIC

MAXIMUM RATINGS

Rating	Symbol	MUR								Unit
		1605CT	1610CT	1615CT	1620CT	1630CT	1640CT	1650CT	1660CT	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	50	100	150	200	300	400	500	600	Volts
Average Rectified Forward Current Total Device, (Rated V _R), T _C = 150°C	I _{F(AV)}	8.0								Amps
Peak Repetitive Forward Current (Rated V _R , Square Wave, 20 kHz), T _C = 150°C	I _{FM}	16								Amps
Nonrepetitive Peak Surge Current (Surge applied at rated load conditions halfwave, single phase, 80 Hz)	I _{FSM}	100								Amps
Operating Junction Temperature and Storage Temperature	T _J , T _{stg}	-65 to +175								°C

THERMAL CHARACTERISTICS, PER DIODE LEG

Maximum Thermal Resistance, Junction to Case	R _{θJC}	3.0	2.0	°C/W
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ELECTRICAL CHARACTERISTICS, PER DIODE LEG

Maximum Instantaneous Forward Voltage (1) (I _F = 8.0 Amp, T _C = 150°C) (I _F = 8.0 Amp, T _C = 25°C)	V _F	0.895 0.975	1.00 1.30	1.20 1.50	Volts
Maximum Instantaneous Reverse Current (1) (Rated dc Voltage, T _C = 150°C) (Rated dc Voltage, T _C = 25°C)	i _R	250 5.0	500 10	500 10	µA
Maximum Reverse Recovery Time (I _F = 1.0 Amp, di/dt = 50 Amp/µs) (I _F = 0.5 Amp, i _R = 1.0 Amp, I _{REC} = 0.25 Amp)	t _{rr}	35 25	60 50		ns

(1) Pulse Test Pulse Width = 300 µs, Duty Cycle < 2.0%

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