

Ultra fast Rectifier

BYW29E-200

FEATURES

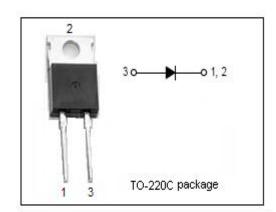
- · With TO-220 packaging
- · Metal silicon junction, majority carrier conduction
- · Low power loss, high efficiency
- · Guardring for overvoltage protection
- · High surge capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

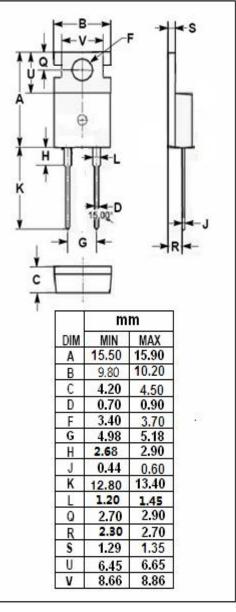
APPLICATIONS

- Switching power supply
- · High frequency inverters
- · Reverse battery protection
- · Polarity protection applications



SYMBOL	PARAMETER	VALUE	UNI T
V _{RRM} V _{RMS} V _R	Peak Repetitive Reverse Voltage RMS Voltage DC Blocking Voltage	200	V
I _{F(AV)}	Average Rectified Forward Current @Tc=128℃	8	Α
IFRM	Repetitive Peak Forward Current@Tc=128℃	16	А
I _{FSM}	Nonrepetitive Peak Surge Current 10 ms single half sine-wave superimposed on rated load conditions;One shot(50Hz)	80	А
Tj	Junction Temperature	-40~175	${\mathbb C}$
T _{stg}	Storage Temperature Range	-55~175	$^{\circ}$





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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance,Junction to Case	2.7	°C/W

ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width=300 µ s,Duty Cycle≤1%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
VF	Maximum Instantaneous Forward Voltage	I _F = 8A;Tc= 25°C I _F = 8A;Tc= 150°C I _F = 20A;Tc= 25°C	1.05 0.895 1.3	V
I _R	Maximum Instantaneous Reverse Current	V _R = rated V _{RRM;} Tc= 25°C Tc=150°C	10 600	μ А
t _{rr}	Maximum Reverse Recovery Time	I _F =1A;dI _F /dt=-100A/ μ s;V _R =30V	25	ns

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