

Fast Rectifier

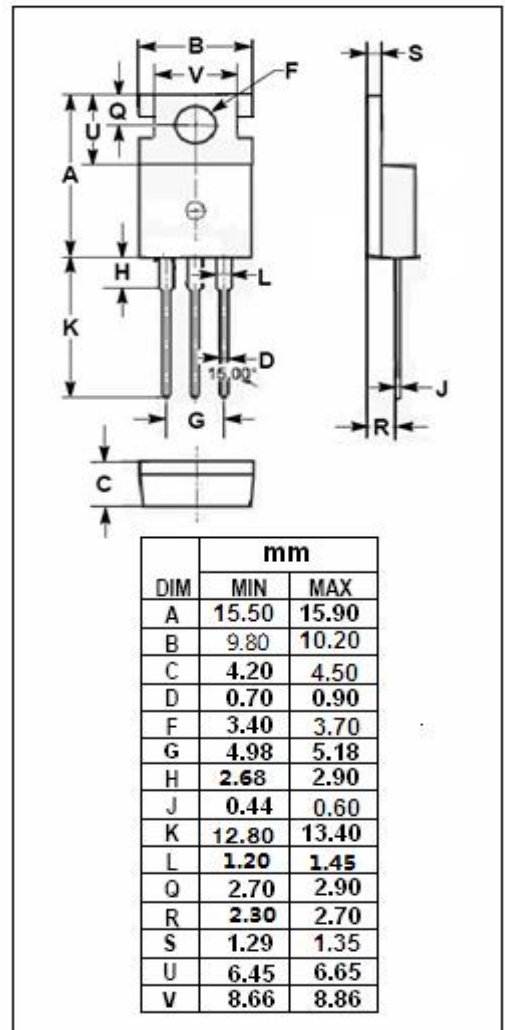
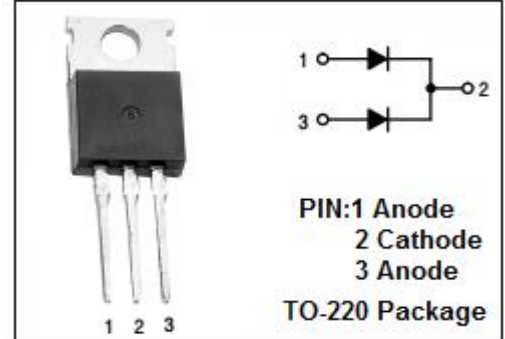
BYV32E-200

FEATURES

- With TO-220 packaging
- High junction temperature capability
- Low forward voltage
- High current capability
- Low power loss, high efficiency
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Free-Wheeling diodes
- Reverse battery protection




ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM} V _{RMS} V _R	Peak Repetitive Reverse Voltage RMS Voltage DC Blocking Voltage	200	V
I _{F(AV)}	Average Rectified Forward Current @T _c =100°C	20	A
I _{FSM}	Nonrepetitive Peak Surge Current (10ms single half sine-wave superimposed on rated load conditions)	125	A
T _J	Junction Temperature	-40~150	°C
T _{stg}	Storage Temperature Range	-40~150	°C

Fast Rectifier**BYV32E-200****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.4	$^{\circ}C/W$

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F=20A$ 	1.15	V
I_R	Maximum Instantaneous Reverse Current	$V_R = \text{rated } V_{RRM}; @T_j=25^{\circ}C$ $T_j=100^{\circ}C$	30 600	μA
t_{rr}	Maximum Reverse Recovery Time	$I_F = 1A; di_F/dt = -100A/\mu s; V_R = 30V$	25	ns