

## Ultrafast Recovery Rectifier

## BYQ28ED-200

## FEATURES

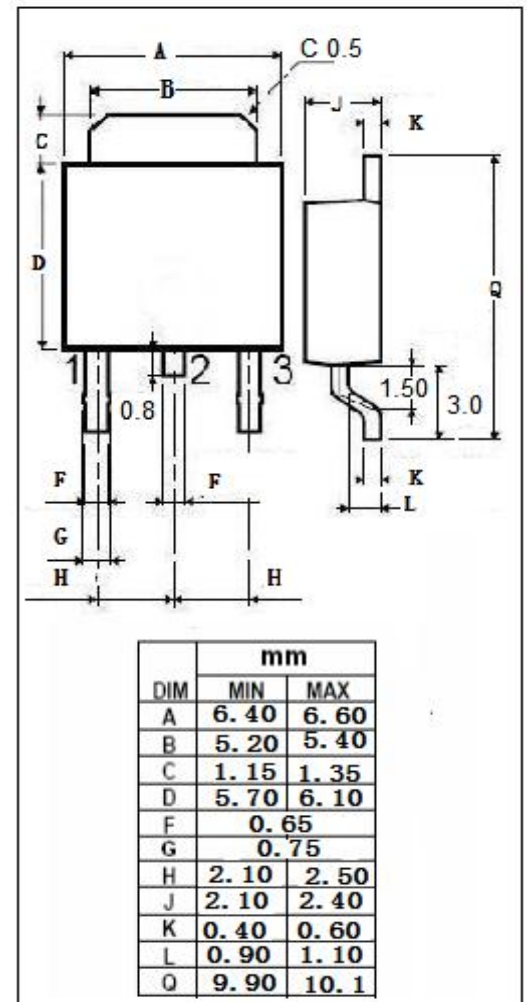
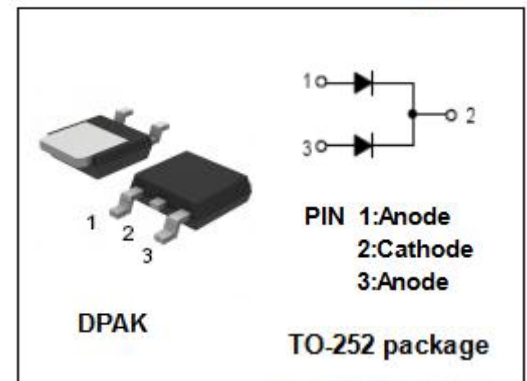
- Ultrafast Recovery Time
- Low Forward Voltage
- Low Leakage Current
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## APPLICATIONS

- Output rectifiers in high-frequency switched-mode power supplies.

ABSOLUTE MAXIMUM RATINGS( $T_a=25^\circ\text{C}$ )

SYMBOL	PARAMETER	VALUE	UNIT
$V_{RRM}$ $V_{RWM}$ $V_R$	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	200	V
$I_{F(AV)}$	Average Rectified Forward Current Per Leg Total device	10	A
$I_{FSM}$	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	50	A
$P_D$	Maximum power dissipation	42	W
$T_J$	Junction Temperature	-40~150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-40~150	$^\circ\text{C}$



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## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	3.0	°C/W

ELECTRICAL CHARACTERISTICS ( $T_a=25^{\circ}\text{C}$ ) (Pulse Test: Pulse Width=300  $\mu$ s, Duty Cycle  $\leq 2\%$ )

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
$V_F$	Maximum Instantaneous Forward Voltage	$I_F = 5\text{A}; T_j = 25^{\circ}\text{C}$ $I_F = 5\text{A}; T_j = 150^{\circ}\text{C}$ $I_F = 10\text{A}; T_j = 25^{\circ}\text{C}$	1.1 0.895 1.25	V
$I_R$	Maximum Instantaneous Reverse Current	$V_{RRM} = 200\text{V}$	10	$\mu\text{A}$
$t_{rr}$	Maximum Reverse Recovery Time	$I_F = 1\text{A}$	25	ns

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