

Ultrafast Recovery Rectifier
BYQ28ED-200
FEATURES

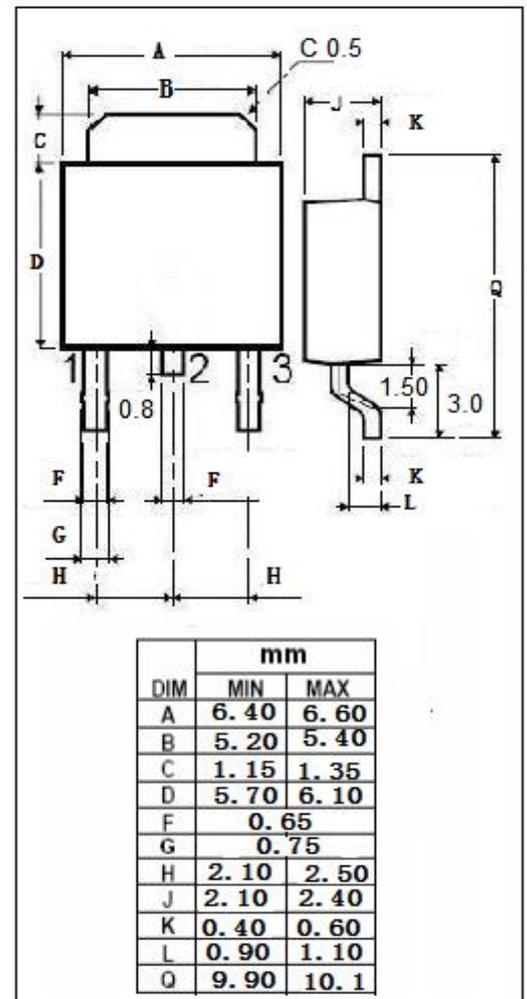
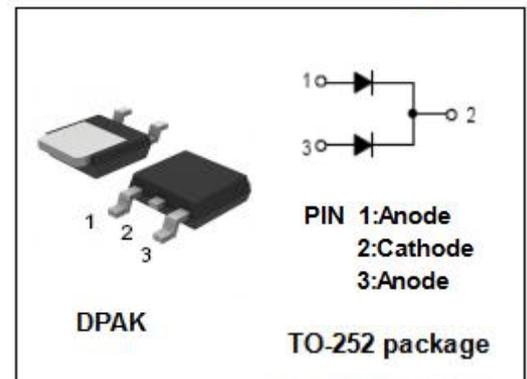
- Ultrafast Recovery Time
- Low Forward Voltage
- Low Leakage Current
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

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

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _R RM V _R 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	°C
T _{stg}	Storage Temperature Range	-40~150	°C



Ultrafast Recovery Rectifier

BYQ28ED-200

THERMAL CHARACTERISTICS

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

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$) (Pulse Test: Pulse Width=300 μs , 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	μA
t_{rr}	Maximum Reverse Recovery Time	$I_F=1\text{A}$	25	ns

NOTICE:

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.