

# Fast Recovery Rectifier

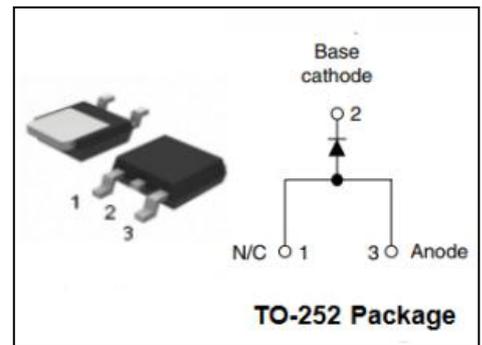
# IDD06E60

### FEATURES

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

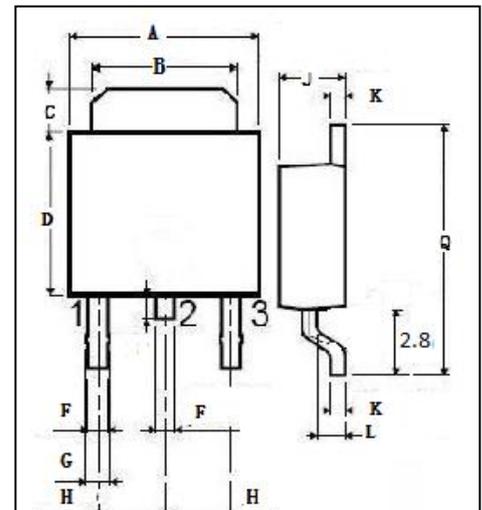
### APPLICATIONS

- Designed for use in switching power supplies, inverters and as free wheeling diodes



### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>RRM</sub>	Peak Repetitive Reverse Voltage	600	V
I <sub>F(AV)</sub>	Average Rectified Forward Current (Rated V <sub>R</sub> )	15	A
I <sub>FSM</sub>	Non-repetitive Peak Surge Current (Rated V <sub>R</sub> applied)	30	A
T <sub>J</sub>	Junction Temperature	-40~150	°C
T <sub>stg</sub>	Storage Temperature Range	-40~150	°C



DIM	mm	
	MIN	MAX
A	6.4	6.6
B	5.2	5.4
C	1.3	1.7
D	5.2	5.7
F	0.6	0.7
G	0.65	0.75
H	2.1	2.5
J	2.1	2.4
K	0.4	0.6
L	0.9	1.1
Q	9.5	10

### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th(j-c)</sub>	Thermal Resistance, Junction to Case	3.2	°C/W

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**ELECTRICAL CHARACTERISTICS**(T<sub>a</sub>=25°C) (Pulse Test: Pulse Width=300 μs, Duty Cycle≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V <sub>F</sub>	Instantaneous Forward Voltage	I <sub>F</sub> = 6A; T <sub>J</sub> =25°C	2	V
I <sub>R</sub>	Instantaneous Reverse Current	V <sub>RRM</sub> = 600V; T <sub>J</sub> =25°C	50	μA
		V <sub>RRM</sub> = 600V; T <sub>J</sub> =150°C	500	
t <sub>rr</sub>	Reverse Recovery Time	I <sub>F</sub> = 6A; di/dt =550A/μs	70	ns

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