

## 1. Features

This series are state-of-the-art devices designed for use in switching power supplies, inverters and as free wheeling diodes.

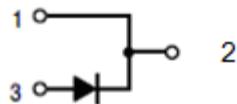
## 2. Features

- n High efficiency, low VF
- n High current capability
- n High reliability
- n Reverse voltage to 600 V
- n High surge current capability
- n Low power loss.
- n For use in low voltage, high frequency inventor, free wheeling, and polarity protection application

## 3. Mechanical Characteristics

- n Case: TO-252 Molded plastic
- n Epoxy: UL 94V-0 rate flame retardant
- n Terminals: Pure tin plated, lead free. solderable per MIL-STD-202, Method 208 guaranteed
- n Polarity: As marked
- n High temperature soldering guaranteed: 260°C/10 seconds .16",(4.06mm) from case.

## 4. Pin configuration



Pin	Function
1,2	Cathode
3	Anode

## 5. Maximum ratings

 (T<sub>J</sub>=25°C, unless otherwise notes)

Parameter	Symbol	Rating	Units
Peak repetitive reverse voltage Working peak reverse voltage DC blocking voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	600	V
Maximum average forward rectified current . T <sub>C</sub> = 110°C	I <sub>F(AV)</sub>	6	A
RMS Forward Current	I <sub>F(RMS)</sub>	8.4	A
Nonrepetitive peak surge current (Surge applied at rated load conditions halfwave, single phase, 60 Hz)	I <sub>FSM</sub>	56	A
Operating junction temperature and storage temperature range	T <sub>J</sub> , T <sub>stg</sub>	-55 to +150	°C

## 6. Thermal characteristics

Parameter	Symbol	Rating	Unit
Maximum thermal resistance, junction-to-case	R <sub>θJC</sub>	2	°C/W

## 7. Electrical characteristics

Parameter	Symbol	Conditions	Rating			Unit	
			Min	Typ	Max		
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =6.0A, T <sub>C</sub> =25°C	-	1.4	1.70	V	
Reverse Leakage Current	I <sub>RM</sub>	V <sub>R</sub> =600V	T <sub>J</sub> =150°C	-	-	500	μA
			T <sub>J</sub> =25°C	-	-	10	
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =1A, V <sub>R</sub> =30V, di/dt=200A/us	-	-	28	ns	