

## **CREATEK Microelectronics**

# **Fast Recover Diode Module**

#### **Features**

- Fast Recovery,trr= 65ns
- Operating Temperature 150 °C
- Reverse Voltage 600V
- Avalanche Energy Rated



#### **Mechanical Data**

- Case: ØH (plastic package). Lead free; RoHS compliant
- Molding Compound Flammability Rating: UL 94 V-0
- **Terminals:** High temperature soldering guaranteed: 260 °C/10 sec. at terminals

## **Applications**

- Switch Mode Power Supplies
- Hard Switched PFC Boost Diode
- UPS Free Wheeling Diode
- Motor Drive FWD
- SMPS FWD

# **Absolute Maximum Ratings**

Symbol	Parameter	Value	Units
V <sub>RRM</sub>	Peak Repetitive Reverse Voltage	600	V
I <sub>F(AV)</sub>	Diode Continuous Forward Current ( T <sub>C</sub> =100°C)	200	Α
IFRM	Repetitive Peak Surge Current (20kHz Square Wave)	400	Α
IFSM	Nonrepetitive Peak Surge Current for Per Diode (Halfwave 1 Phase 50Hz)	2000	Α
TJ	Operating JunctionTemperatureRange	-55 to +150	℃
T <sub>STG</sub>	StorageTemperatureRange	-55 to +150	℃

# Electrical Specifications (TJ = 25 °C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Тур.	Max.	Units
VR	Cathode to Anode Breakdown Voltage	IR = 100μA	600			
V <sub>F</sub>	Diode Forward Voltage	I <sub>F</sub> =100AT <sub>C</sub> =25°C		1.20	1.3	٧
	Diode Forward Voltage	I <sub>F</sub> =100AT <sub>C</sub> =125°C		1.00		V
lгм	Maximum Reverse Leakage Current	VR=400VT <sub>C</sub> =25°C			100	μΑ
		VR=400VT <sub>C</sub> =125°C			1	mA

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