

# **Schottky Barrier Rectifier**

# 6CWQ10FN

#### **FEATURES**

- · Low Forward Voltage
- · Low Power Loss/High Efficiency
- · High Surge Capacity
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

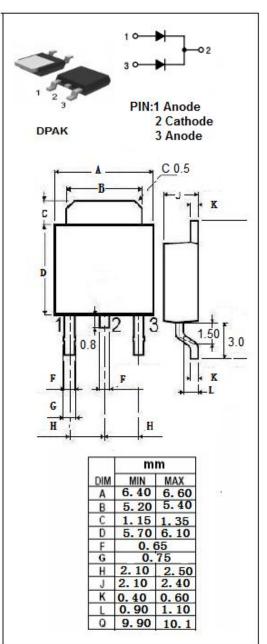
### **APPLICATIONS**



 Typical applications are in disk drives, switching power supplies, converters, free-wheeling diodes, battery charging, and reverse Battery protection.

### ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>RRM</sub> V <sub>RWM</sub>	Peak Repetitive Reverse Voltage RMS Voltage	100	V
I <sub>F(AV)</sub>	Average Rectified Forward Current	7	Α
I <sub>FSM</sub>	Non-repetitive Peak Surge Current	440	А
TJ	Junction Temperature	-40~150	${\mathbb C}$
T <sub>stg</sub>	Storage Temperature Range	-40~150	°C





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### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance,Junction to Case	2.35	°C/W

### **ELECTRICAL CHARACTERISTICS** (Pulse Test: Pulse Width=300 μ s,Duty Cycle≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V <sub>FM</sub>	Maximum Instantaneous Forward Voltage	I <sub>F</sub> = 3A; T <sub>C</sub> = 25°C I <sub>F</sub> = 3A; T <sub>C</sub> = 125°C I <sub>F</sub> = 6A; T <sub>C</sub> = 25°C I <sub>F</sub> = 6A; T <sub>C</sub> = 125°C	0.81 0.63 0.96 0.74	V
I <sub>RM</sub>	Maximum Instantaneous Reverse Current	Rated DC Voltage, $T_C$ = 25 $^{\circ}$ C Rated DC Voltage, $T_C$ = 125 $^{\circ}$ C	1 4.9	mA



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