

# **Standard Rectifier Diode**

#### **FEATURES**

- · Low leakage current
- Low forward voltage drop
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

# K1K2 A1 2 3



#### **APPLICATIONS**

 Powerex Dual Diode Modules are designed for use in applications requiring rectification and isolated packaging.

### **ABSOLUTE MAXIMUM RATINGS**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{RRM}$	Repetitive Peak Reverse Voltage	tp=10ms	4000	V
I <sub>F(AV)</sub>	Average Forward Current	Tc=100℃,50Hz,180° Conduction	450	А
I <sub>F(RMS)</sub>	RMS Forward Current		1256	Α
I <sub>FSM</sub>	Surge Forward Current	tp=10ms,V <sub>R</sub> =0.6V <sub>RRM</sub>	18000	Α
l²t	I <sup>2</sup> t for Fusing for One Cycle		1650000	A <sup>2</sup> s
V <sub>iso</sub>	Isolated Voltage	R.M.S, f= 50Hz, t= 1min,I <sub>iso</sub> =1mA	2500	V
TJ	Junction Temperature		-40~150	$^{\circ}$ C
T <sub>stg</sub>	Storage Temperature Range		-40~150	$^{\circ}$ C

#### THERMAL CHARACTERISTICS

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

#### **ELECTRICAL CHARACTERISTICS**

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
VF	Forward Voltage drop	I <sub>F</sub> =2400A, T <sub>J</sub> = 25℃	18	V
I <sub>RRM</sub>	Instantaneous Reverse Current	V <sub>R</sub> =V <sub>RRM</sub> ,T <sub>J</sub> =150°C	45	mA

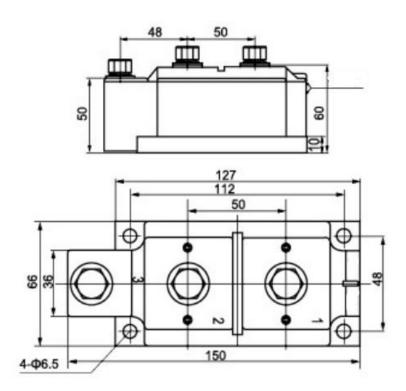
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## **Standard Rectifier Diode**

#### **PACKAGE OUTLINE**

Dimensions in mm (1mm = 0.0394)



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