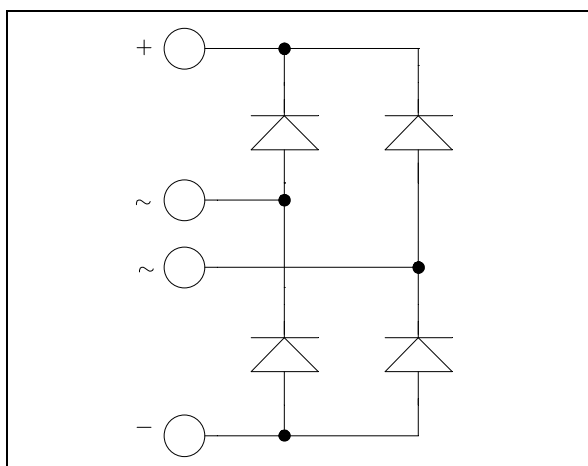


## ISOTOP<sup>®</sup> Schottky Diode Full Bridge Power Module

**$V_{RRM} = 100V$**   
 **$I_F = 60A @ T_c = 80^{\circ}C$**

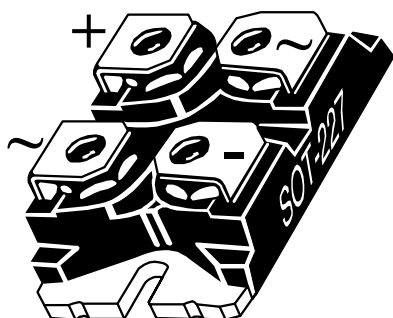


### Application

- Switch mode power supplies rectifier
- Induction heating
- Welding equipment

### Features

- Ultra fast recovery times
- Soft recovery characteristics
- High current
- Very low stray inductance
- High level of integration
- ISOTOP<sup>®</sup> Package (SOT-227)



### Benefits

- Outstanding performance at high frequency operation
- Low losses
- Low noise switching
- Direct mounting to heatsink (isolated package)
- Low junction to case thermal resistance
- RoHS Compliant

### Absolute maximum ratings

Symbol	Parameter			Max ratings	Unit
V <sub>R</sub>	Maximum DC reverse Voltage			100	V
V <sub>RRM</sub>	Maximum Peak Repetitive Reverse Voltage				
I <sub>FAV</sub>	Rectangular, d=0.5		T <sub>C</sub> = 80°C	60	A
I <sub>FSM</sub>	Non-Repetitive Forward Surge Current	t=10ms	T <sub>J</sub> = 45°C	700	

**CAUTION:** These Devices are sensitive to Electrostatic Discharge. Proper Handling Procedures Should Be Followed. See application note APT0502 on [www.microsemi.com](http://www.microsemi.com)

All ratings @  $T_j = 25^{\circ}\text{C}$  unless otherwise specified

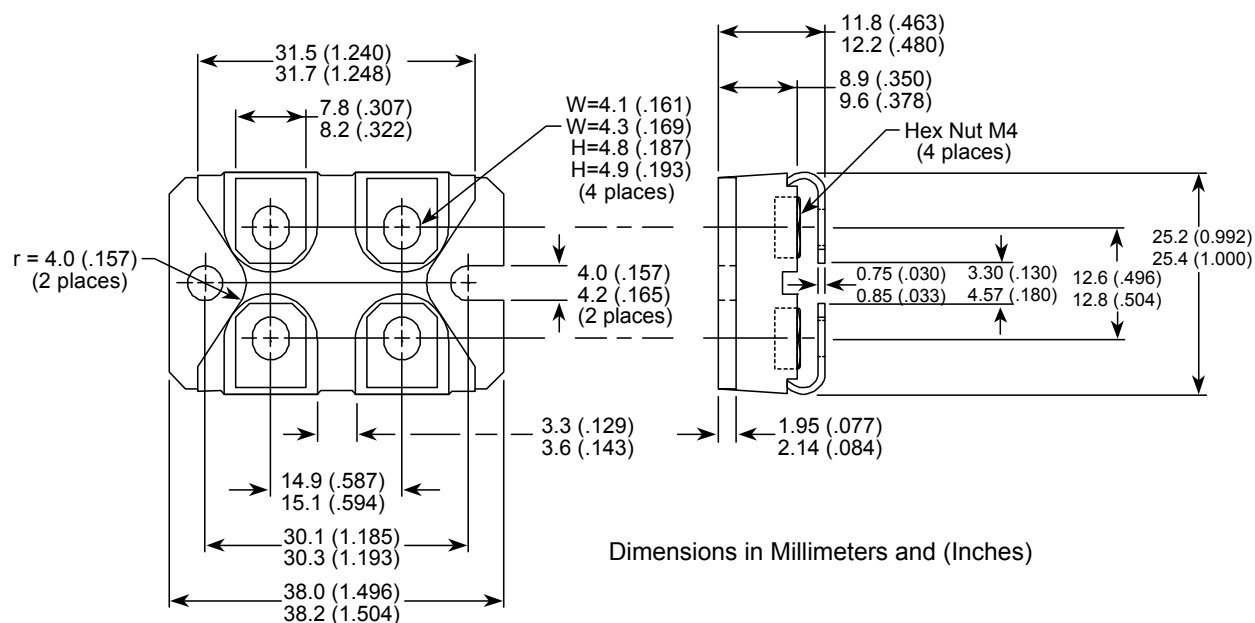
## Electrical Characteristics

Symbol	Characteristic	Test Conditions	Min	Typ	Max	Unit
$I_R$	Reverse Current	$V_R = 100\text{V}$	$T_j = 25^{\circ}\text{C}$	2		mA
			$T_j = 125^{\circ}\text{C}$	20		
$V_F$	Forward Voltage	$I_F = 60\text{A}$	$T_j = 25^{\circ}\text{C}$	0.91		V
			$T_j = 125^{\circ}\text{C}$	0.74		

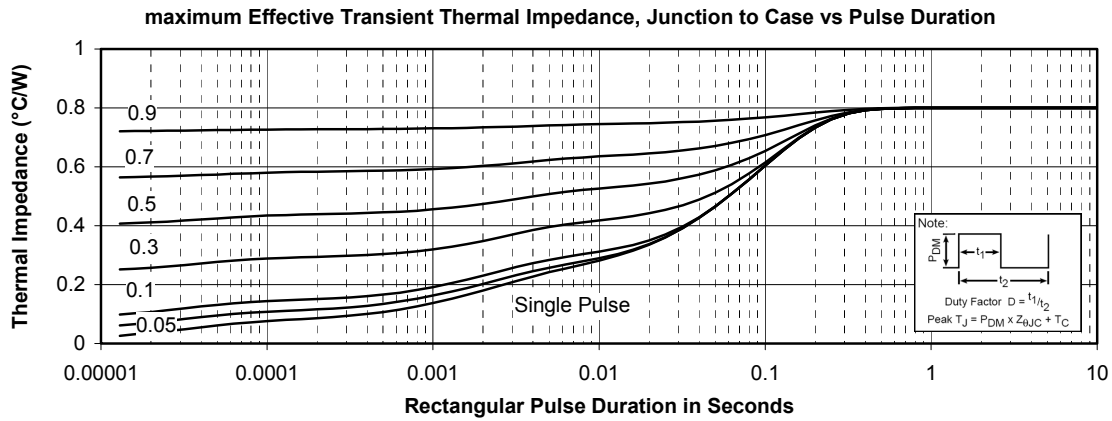
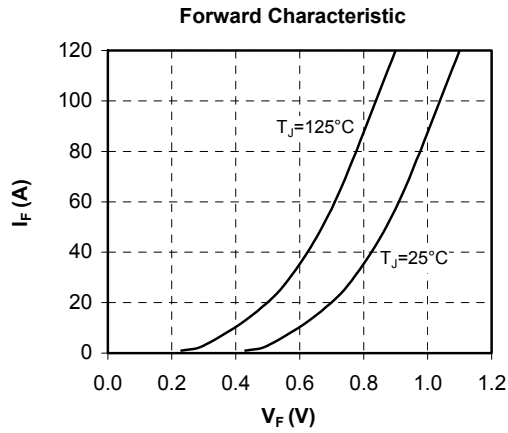
## Thermal and package characteristics

Symbol	Characteristic	Min	Typ	Max	Unit
$R_{thJC}$	Junction to Case Thermal resistance			0.8	$^{\circ}\text{C/W}$
$R_{thJA}$	Junction to Ambient			20	
$V_{ISOL}$	RMS Isolation Voltage, any terminal to case $t = 1\text{ min}$ , 50/60Hz	2500			V
$T_j, T_{STG}$	Storage Temperature Range	-55		150	$^{\circ}\text{C}$
$T_L$	Max Lead Temp for Soldering: 0.063" from case for 10 sec			300	
Torque	Mounting torque (Mounting = 8-32 or 4mm Machine and terminals = 4mm Machine)			1.5	N.m
Wt	Package Weight		29.2		g

## SOT-227 (ISOTOP<sup>®</sup>) Package Outline



## Typical Performance Curve



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