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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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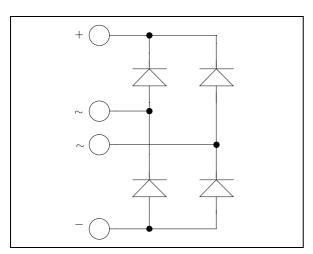






# ISOTOP® Schottky Diode Full Bridge Power Module

$$V_{RRM} = 45V$$
  
 $I_F = 60A$  @  $Tc = 80$ °C

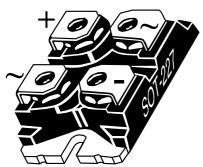


### Application

- 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® 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
$V_R$	Maximum DC reverse Voltage			15	V
$V_{RRM}$	Maximum Peak Repetitive Reverse Voltage			45	
$I_{FAV}$	Rectangular, d = 0.5		$T_C = 80$ °C	60	Α
$I_{FSM}$	Non-Repetitive Forward Surge Current	t = 10 ms	$T_J = 45^{\circ}C$	600	Α

CAUTION: These Devices are sensitive to Electrostatic Discharge. Proper Handling Procedures Should Be Followed. See application note

1 - 4



### All ratings @ $T_i = 25^{\circ}C$ unless otherwise specified

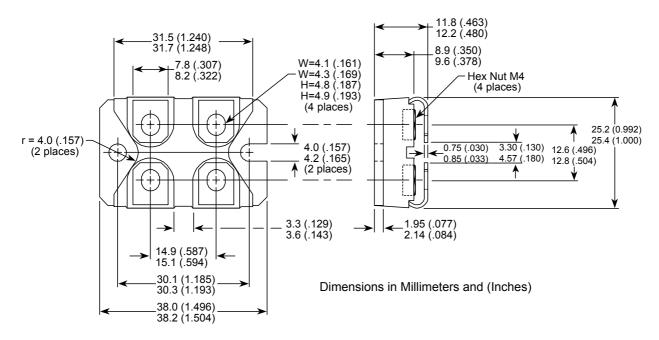
### **Electrical Characteristics**

Symbol	Characteristic	Test Conditions		Min	Typ	Max	Unit
$I_R$	Reverse Current	$V_R = 45V$	$T_j = 25^{\circ}C$		30		mA
			$T_j = 125$ °C		250		
$V_{\mathrm{F}}$	Forward Voltage	$I_F = 60A$	$T_j = 25$ °C		0.58		V
			$T_j = 125$ °C		0.48		

### Thermal and package characteristics

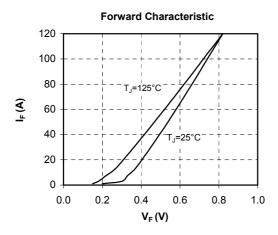
Symbol	Characteristic	Min	Typ	Max	Unit
$R_{thJC}$	Junction to Case Thermal resistance			0.8	°C/W
$R_{thJA}$	Junction to Ambient			20	C/ VV
$V_{ISOL}$	RMS Isolation Voltage, any terminal to case t =1 min, 50/60Hz	2500			V
$T_{J}, T_{STG}$	Storage Temperature Range	-55		150	°C
$T_{ m L}$	Max Lead Temp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

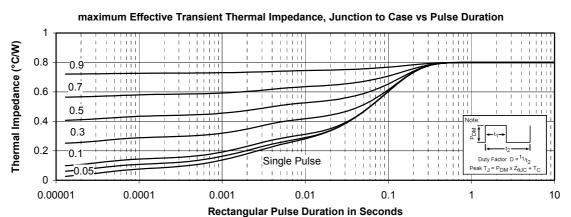
## **SOT-227 (ISOTOP®) Package Outline**





### **Typical Performance Curve**





ISOTOP® is a registered trademark of ST Microelectronics NV



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