# Schottky Barrier Rectifier multicomp PRO





### **Features**

- · For surface mounted application
- · Trench schottky technology
- Low forward voltage drop, high efficiency
- High current capability
- · High surge capacity
- Plastic package has UL flammability classification 94V-0
- For use in low voltage, high frequency inverters, free wheeling, switching power supplies, DC-DC converter, and polarity protection applications

### **Mechanical Data**

Case : Molded plastic

Polarity: Indicated by cathode band Weight: 0.002ounces, 0.053 grams

## **Maximum Ratings And Electrical Characteristics**

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

Characteristic	Symbol	Values	Unit			
Maximum Ratings (T <sub>A</sub> = 25 °C unless otherwise noted)						
Maximum Recurrent Peak Reverse Voltage	VRRM	60				
Maximum RMS Voltage	VRMS	42	V			
Maximum DC Blocking Voltage	VDC	60				
Maximum Average Forward Rectified Current	I(AV)	5				
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load	IFSM	30	А			
Peak repetitive reverse current at tp = 2µs, 1kHz	IRRM	1				
Operating Temperature Range	TJ	-55 to +150	°C			
Storage Temperature Range	Тѕтс	-55 to +175				
Electrical Characteristics (T <sub>A</sub> = 25 °C unless otherwise noted)						

	•		<u> </u>		
Parameter /	Conditions	Symbol	Тур	Max	Unit
Breakdown voltage per diode		VBR	60 (minimun)	-	
Forward Voltage (Note1)	IF=2.5A @TJ=25°C IF=2.5A @TJ=125°C IF=5A @TJ=25°C IF=5A @TJ=125°C	VF	0.41 0.34 0.49 0.47	0.45 0.37 0.54 0.52	V
Maximum DC Reverse Current @TJ=25°C at Rated DC Bolcking Voltage @TJ=125°C		lr	200 50		μA mA
Typical Junction Canacitan	ice (Note 2)	Cı	33	84	nF

Newark.com/multicomp-pro Farnell.com/multicomp-pro Element14.com/multicomp-pro



# Schottky Barrier Rectifier multicomp PRO



Thermal Characteristics (TA = 25 °C unless otherwise noted)					
Parameter	Symbol	Values	Unit		
Thermal Resistance Per Diode (Note3)	Røjl	20	°C/W		

#### Notes:

- 1. 300µs pulse width, 2% duty cycle.
- 2. Measured at 1MHz and applied reverse voltage of 4V DC.
- 3. Thermal resistance junction to lead.

# **Rating and Characteristic Curves**

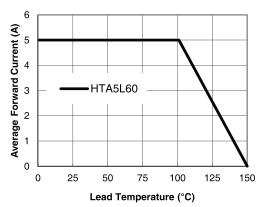


Figure 1. Forward Current Derating Curve

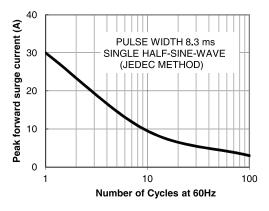
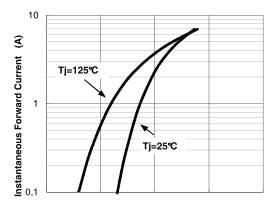


Figure 2. Maximum NON-Repetitive



Instantaneous Forward Voltage (V) Figure 3. Typical Instantaneous Forward Characteristics Per Leg

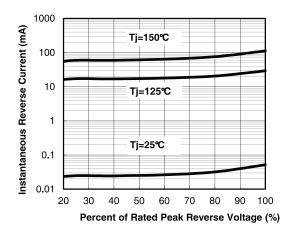


Figure 4. Typical Reverse Characteristics

Newark.com/multicomp-pro Farnell.com/multicomp-pro Element14.com/multicomp-pro



# Schottky Barrier Rectifier multicomp PRO

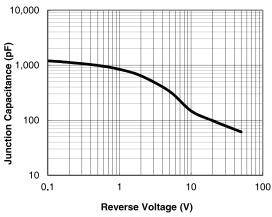


Figure 5. Typical Junction Capacitance

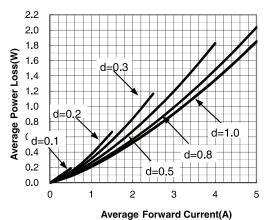
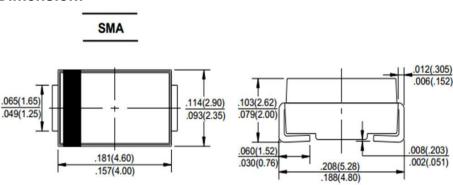


Figure 6. Forward Power Loss Characteristics

### **Dimension:**



Dimensions: Inches (Millimetres)

# **Part Number Table**

Description	Part Number	
Schottky Barrier Rectifier	HTA5L60	

Important Notice: This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.

Page <3>

Newark.com/multicomp-pro Farnell.com/multicomp-pro Element14.com/multicomp-pro

