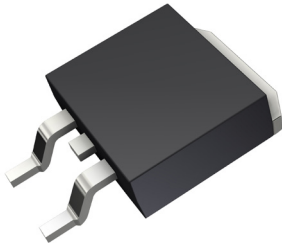


# Schottky Barrier Rectifier

## V<sub>RRM</sub> 100 Volts, 20A

**multicomp** PRO

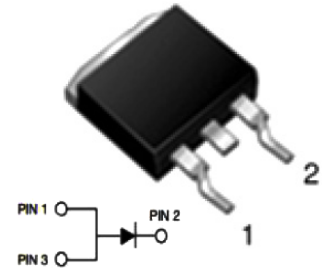
**RoHS  
Compliant**



### Features

- Metal of silicon rectifier
- Majority used for carrier conduction
- Trench Schottky Technology
- Low power loss, high efficiency
- High current capability, low VF
- High surge capacity
- Lead free
- Meet UL flammability classification 94V-0
- Case style: TO-263AB
- Weight: 0.08 ounces, 2.24 grams

TO-263AB



### 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%.

Characteristics	Symbol	Values	Unit
Max. Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	100	V
Max. RMS Voltage	V <sub>RMS</sub>	70	
Max. DC Blocking Voltage	V <sub>DC</sub>	100	
Max. Average Forward Rectified Current (See Fig. 1)	I <sub>(AV)</sub>	20	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load	I <sub>FSM</sub>	240	
Peak repetitive reverse current at tp = 2 μs, 1kHz	I <sub>R</sub>	1	
Operating Temperature Range	T <sub>J</sub>	-55 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +175	

### Electrical Characteristics

Parameter / Conditions	Symbol	Typ.	Max	Unit
Breakdown voltage per diode	V <sub>BR</sub>	100 (minimum)	-	V
Instantaneous forward voltage per diode (Note1) IF=5A @ T <sub>J</sub> =25°C IF=5A @ T <sub>J</sub> =125°C IF=10A @ T <sub>J</sub> =25°C IF=10A @ T <sub>J</sub> =125°C	V <sub>F</sub>	0.52 0.48 0.64 0.6	0.58 0.52 0.72 0.66	
Maximum DC Reverse Current @ T <sub>J</sub> = 25°C at Rated DC Blocking Voltage @T <sub>J</sub> = 125°C	I <sub>R</sub>	100 60		
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	985		

### Thermal Characteristics

Thermal Resistance Per Diode (Note 3)	R <sub>θJC</sub>	3.5	°C/W
---------------------------------------	------------------	-----	------

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

**multicomp** PRO

# Schottky Barrier Rectifier

## V<sub>RRM</sub> 100 Volts, 20A

**multicomp** PRO

**Notes:**

1. 300µs pulse width, 2% duty cycle.
2. Measured at 1MHz and applied reverse voltage of 5V DC.
3. Thermal resistance junction to case.

### Rating and Characteristic Curves

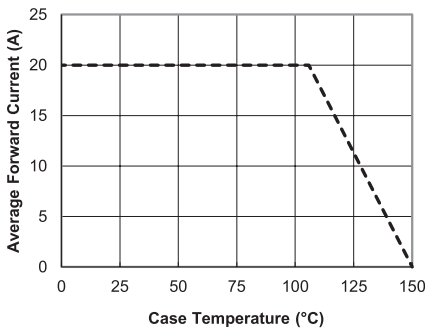


Figure 1. Forward Current Derating Curve

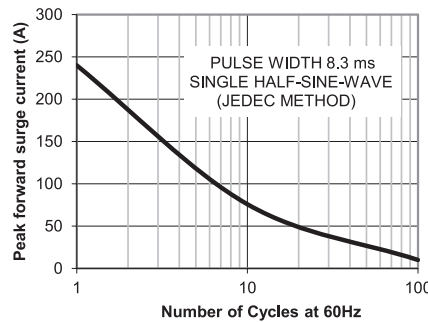


Figure 2. Maximum NON-Repetitive

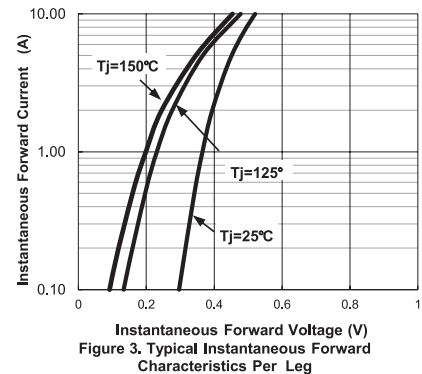


Figure 3. Typical Instantaneous Forward Characteristics Per Leg

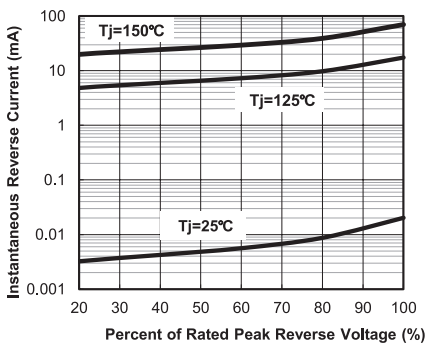


Figure 4. Typical Reverse Characteristics

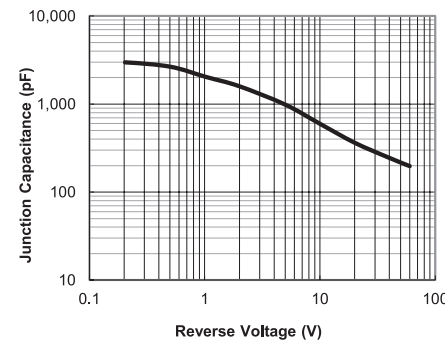


Figure 5. Typical Junction Capacitance

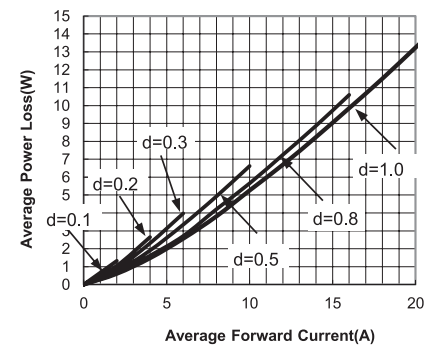
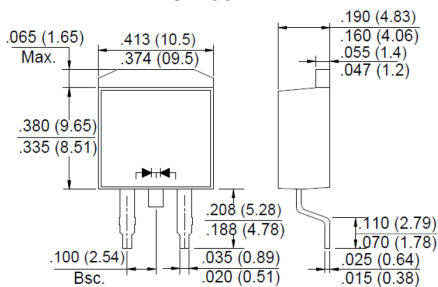


Figure 6. Forward Power Loss Characteristics

**TO-263AB**



Dimensions : Inches (Millimetres)

**Part Number Table**

Description	Part Number
Schottky Rectifier, Single, 100V, 20A, TO-263AB	MP001026

**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.

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

**multicomp** PRO