Schottky Barrier Rectifier multicomp PRO

RoHS **Compliant**



Features

- Metal of silicon rectifier, majority carrier conduction
- Trench schottky technology
- Low power loss, high efficiency
- High current capability, low VF
- 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 : TO-220AB

Polarity : As marked on the body Weight : 0.08ounces, 2.24 grams

Mounting position

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	Val	ues	Unit	
Maximum Ratings (TA = 25 °C unless otherwise noted)					
Maximum Recurrent Peak Reverse Voltage	VRRM	12	20	V	
Maximum RMS Voltage	VRMS	8	4		
Maximum DC Blocking Voltage	VDC	12	20	7	
Maximum Average Forward Rectified Current (See Fig.1) Maximum Average Forward Rectified Current (Per Leg)	I(AV)	20 10			
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load	Ігѕм	120		A	
Peak repetitive reverse current at tp = 2µs, 1kHz	IRRM			╗	
Operating Temperature Range	TJ	-55 to +150		°C	
Storage Temperature Range	Tstg	-55 to +175			
Electrical Characteristics (TA = 25 °C unless otherwise	noted)				
Parameter / Conditions	Symbol	Тур	Max	Unit	
Breakdown voltage per diode	V _{BR}	120 (minimun)	_		

Parameter / Conditions	Symbol	Тур	Max	Unit
Breakdown voltage per diode	VBR	120 (minimun)	-	
Forward Voltage (Note1)	VF	0.58 0.53 0.75 0.64	0.62 0.57 0.8 0.68	V
Maximum DC Reverse Current @T _J =25°C at Rated DC Bolcking Voltage @T _J =125°C	lr	80 50		μA mA

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



Schottky Barrier Rectifier multicomp PRO



Parameter / Conditions	Symbol	Values	Unit	
Typical Junction Capacitance (Note 2)	CJ	300	pF	
Thermal Characteristics (T _A = 25 °C unless otherwise noted)				
Parameter	Symbol	Values	Unit	
Thermal Resistance Per Diode (Note3)	Rелс	3	°C/W	

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

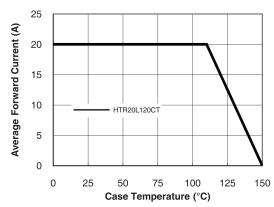


Figure 1. Forward Current Derating Curve

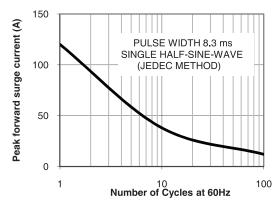
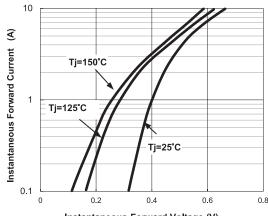


Figure 2. Maximum NON-Repetitive



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

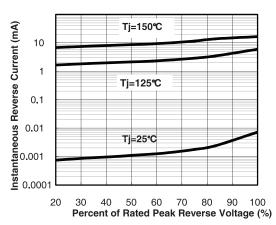


Figure 4. Typical Reverse Characteristics

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



Schottky Barrier Rectifier multicomp PRO



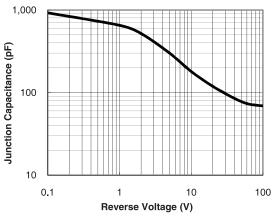


Figure 5. Typical Junction Capacitance

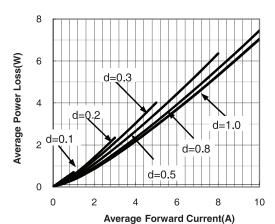
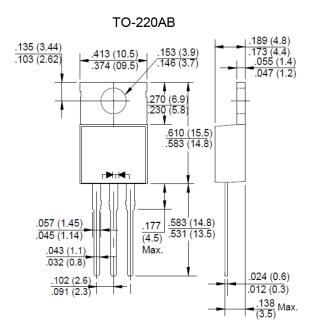


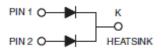
Figure 6. Forward Power Loss Characteristics

Dimension:



Dimensions: Inches (Millimetres)

Pin Configuration



Part Number Table

Description	Part Number	
Schottky Barrier Rectifier	HTR20L120CT	

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

