Schottky Barrier Rectifier







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 : Any

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	20	00	V	
Maximum RMS Voltage	VRMS	14	1 1		
Maximum DC Blocking Voltage	VDC	20	00		
Maximum Average Forward Rectified Current (See Fig.1) Maximum Average Forward Rectified Current (Per Leg)	I(AV)	30 15			
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load	IFSM	33	330		
Operating Temperature Range	TJ	-55 to +150		-0°	
Storage Temperature Range	Тѕтс	-55 to +175			
Electrical Characteristics (T _A = 25 °C unless otherwise noted)					
Parameter / Conditions	Symbol	Тур	Max	Unit	

Parameter	· / Conditions	Symbol	Тур	Max	Unit
Breakdown voltage per dio	de	VBR	205 (minimun)	-	
Forward Voltage (Note1)	IF=7.5A @TJ=25°C IF=7.55A @TJ=125°C IF=15A @TJ=25°C IF=15A @TJ=125°C	VF	0.75 0.56 1.14 0.66	0.81 0.6 1.23 0.7	V
Maximum DC Reverse Cur at Rated DC Bolcking Volta		lr	10 5		μA mA

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Parameter / Conditions	Symbol	Values	Unit		
Typical Junction Capacitance (Note 2)	Сı	249 p			
Thermal Characteristics (T _A = 25 °C unless otherwise noted)					
Parameter	Symbol	Values	Unit		
Thermal Resistance Per Diode (Note3)	Rejc	3	°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 case.

Rating and Characteristic Curves

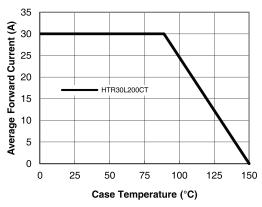


Figure 1. Forward Current Derating Curve

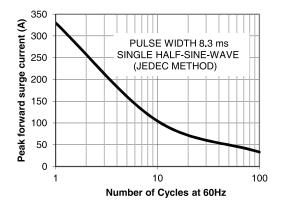
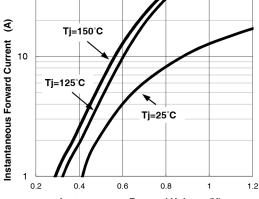


Figure 2. Maximum NON-Repetitive



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

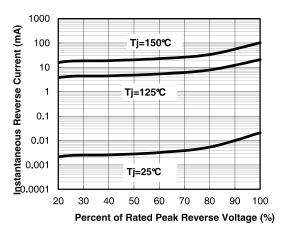


Figure 4. Typical Reverse Characteristics

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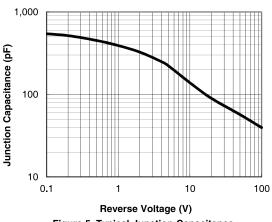
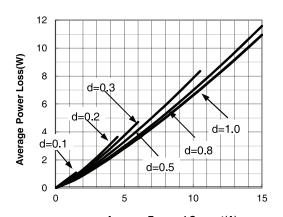
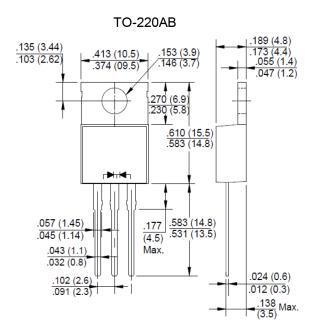


Figure 5. Typical Junction Capacitance



Average Forward Current(A) Figure 6. Forward Power Loss Characteristics

Dimension:



Dimensions: Inches (Millimetres)

Pin Configuration

Part Number Table

Description	Part Number		
Schottky Barrier Rectifier	HTR30L200CT		

HEATSINK

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