

HTR20L100CT, HTRF20L100CT HTRI20L100CT, HTRB20L100CT

HY ELECTRONIC (CAYMAN) LIMITED

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Low VF=0.51V at IF=5A

REVERSE VOLTAGE Volts 100 SCHOTTKY BARRIER RECTIFIERS FORWARD CURRENT 20 **Amperes TO-220AB ITO-220AB FEATURES** Metal of silicon rectifier, majority carrier conduction Trench Schottky Technology **RoHS**

HTR20L100CT HTRF20L100CT

TO-263AB TO-262AA

> HTRB20L100CT HTRI20L100CT

- ●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 / ITO-220AB / TO-262AA / TO-263AB

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%

	MAXIMUM RATING	GS (T _A = 2	5 °C unless ot	herwise noted)			
CHARACTERISTICS		SYMBOL	HTR20L100CT, HTRF20L100CT, HTRI20L100CT, HTRB20L100CT			UNIT	
Maximum Recurrent Peak Reverse Voltage		Vrrm	100			V	
Maximum RMS Voltage		VRMS	70			V	
Maximum DC Blocking Voltage		VDC	100			V	
Maximum Average Forward Rectified Current (See Fig.1) Maximum Average Forward Rectified Current (Per Leg)		I(AV)	20 10			Α	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load		lғsм	140			А	
Peak repetitive reverse current at tp = 2 μs, 1 kHz		I _{RRM}	1			Α	
Operating Temperature Range		TJ	-55 to +150			$^{\circ}$	
Storage Temperature Range		Тѕтс	-55 to +175			$^{\circ}\!\mathbb{C}$	
	ELECTRICAL CHARACTE	ERISTICS	(T _A = 25 °C un	less otherwise	noted)		
PARAMETER / CONDITIONS		SYMBOL	Тур		Max		UNIT
Breakdown voltage per diode		V_{BR}	110 (minimun)		-		V
Forward Voltage (Note1)	IF=5A @TJ=25℃ IF=5A @TJ=125℃ IF=10A @TJ=25℃ IF=10A @TJ=125℃	V _F	0.55 0.59 0.51 0.55 0.69 0.74 0.63 0.67		55 ′4	V	
Maximum DC Reverse Current at Rated DC Bolcking Voltage	@TJ=25℃ @TJ=125℃	lr	50 30		uA mA		
Typical Junction Capacitance (Note2)		Сı	437			pF	
	THERMAL CHARACTER	RISTICS (T _A = 25 °C unle	ess otherwise n	oted)		
PARAMETER		SYMBOL	HTR20L100CT	T HTRF20L100CT	yp HTRI20L100CT HTRB20L100CT		UNIT
Thermal Resistance Per Diode (Note3)		RθJC	3.0	5.5	3.5	3.5	°C/W
NOTES:1 300us pulse width 2%	duty cycle			1	<u> </u>		

NOTES:1.300us pulse width,2% duty cycle.

- 2.Measured at 1.0 MHz and applied reverse voltage of 5.0V DC.
- 3. Thermal resistance junction to case.

Rev.1, 1-Mar-2017

RATING AND CHARACTERTIC CURVES

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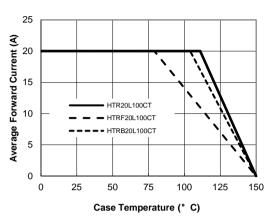


Figure 1. Forward Current Derating Curve

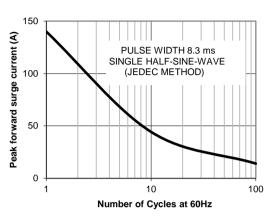
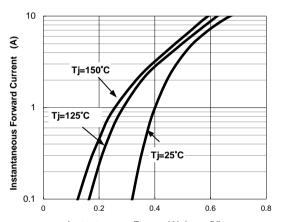


Figure 2. Maximum NON-Repetitive Surge



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

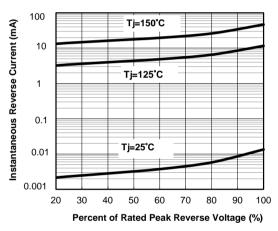


Figure 4. Typical Reverse Characteristics

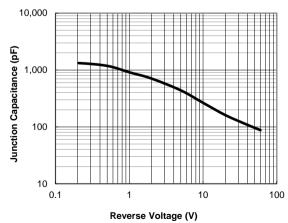


Figure 5. Typical Junction Capacitance

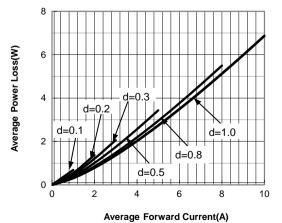


Figure 6. Forward Power Loss Characteristics

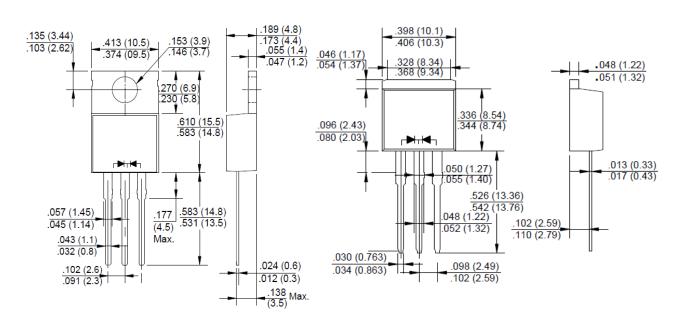
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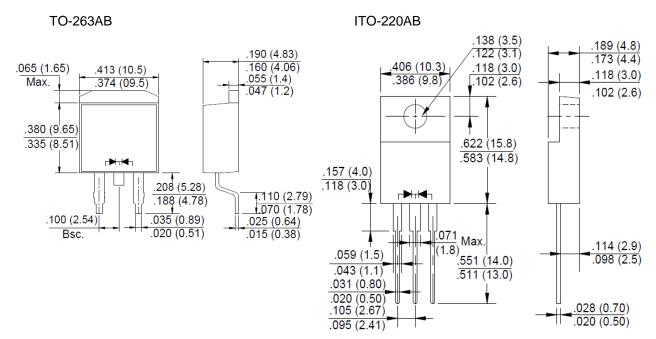
PACKAGE OUTLINE DIMENSIONS in millimeters

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TO-220AB TO-262AA





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