

HTR10U100CT, HTRF10U100CT HTRI10U100CT, HTRB10U100CT

		<u> </u>	<u>CI, HIRB100</u>	
HY ELECTRONIC (CAYMAN) LIMITED	www.h	ygroup.com.tw	Jltra Low VF=0.33	V at IF=1A
SCHOTTKY BARRIER RECTIFIERS		REVERSE VOLT		Volts
		FORWARD CURR	ENT 10 An	nperes
		TO-220AB	ITO-220AB	
FEATURES				
 Metal of silicon rectifier , majority carrier conduction 				
Trench Schottky Technology				HALOGE
●Low power loss, high efficiency				FREE
●High current capability, low VF				
●High surge capacity				^{2°} RoH
Plastic package has UL flammability			1	COMPLIA
classification 94V-0		HTR10U100C	T HTRF10U1000	СТ
For use in low voltage,high frequency inverters,free				
wheeling,switching power supplies, DC-DC		TO-263AB	TO-262AA	
converter , and polarity protection applications				
MECHANICAL DATA				
•Case: TO-220AB / ITO-220AB / TO-262AA / TO-263AB		100		
Polarity: As marked on the body				3
• Weight: 0.08ounces,2.24 grams		PIN 2 O HEATSINK		1
 Mounting position :Any 		HTRB10U100	CT HTRI10U100C	т
		11112100100		
MAXIMUM RATINGS AND ELECTRICAL	CHARACT	TERISTICS		
Rating at 25 $^\circ C$ ambient temperature unless otherwise spec	cified.			
Single phase, half wave ,60Hz, resistive or inductive load.				
For capacitive load, derate current by 20%				
	INGS (T _A = 2	5 °C unless otherwise noted)		
CHARACTERISTICS	SYMBOL	HTR10U100CT, HTRF10U100CT, HTRI10U100CT, HTRB10U100CT		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)	I(AV)	10		А
Maximum Average Forward Rectified Current (Per Leg)		5		
Peak Forward Surge Current 8.3ms Single Half Sine-Wave	IFSM	100)	А
Super Imposed on Rated Load			,	
Peak repetitive reverse current at tp = 2 µs, 1 kHz	I _{RRM}	1		A
Operating Temperature Range	TJ	-55 to +150		
Storage Temperature Range	Тѕтс	-55 to +175		
ELECTRICAL CHARAG	CTERISTICS	(T _A = 25 °C unless otherwise n	oted)	
PARAMETER / CONDITIONS	SYMBOL	Тур	Max	UNIT
	0 INDOL	21		UNIT

/ CONDITIONS	SYMBOL	ИВОL Тур		M	ax	UNIT	
	V _{BR}	110 (minimun) -		-	V		
IF=1.0A @TJ=25℃		0.	43	0.4	16		
IF=1.0A @TJ=125°C		0.	33	0.3	35		
IF=2.5A @TJ=25℃	V	0.	50	0.5	53	V	
IF=2.5A @TJ=1250		0.	44	0.4	17		
IF=5A @TJ=25℃		0.	60	0.6	64		
IF=5A @TJ=125℃		0.	56	0.5	59		
@TJ=25℃	In	70			uA		
@Tj=125℃	IK	20				mA	
ote2)	Сл	307			pF		
THERMAL CHARACTE	RISTICS (T _A = 25 °C unle	ess otherwise n	oted)			
		Тур				UNIT	
FARAWETER		HTR10U100CT	HTRF10U100CT	HTRI10U100CT	HTRB10U100CT		
nermal Resistance Per Diode (Note3)		3.0	5.5	3.5	3.5	°C/W	
	IF=1.0A @TJ=25℃ IF=1.0A @TJ=125℃ IF=2.5A @TJ=25℃ IF=2.5A @TJ=125℃ IF=5A @TJ=25℃ @TJ=25℃ @TJ=125℃ ote2) THERMAL CHARACTEI	VBR IF=1.0A @TJ=25°C IF=1.0A @TJ=125°C IF=2.5A @TJ=25°C IF=2.5A @TJ=25°C IF=5A @TJ=25°C IF=5A @TJ=125°C @TJ=25°C @TJ=25°C IF=5A @TJ=125°C IF=5A @TJ=125°C IR @TJ=125°C Ote2) CJ THERMAL CHARACTERISTICS (* METER	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	VORNEHTION STIMBOL J VBR 110 (minimun) - IF=1.0A @TJ=25°C 0.43 0.4 IF=1.0A @TJ=25°C VF 0.33 0.3 IF=2.5A @TJ=25°C VF 0.50 0.5 IF=2.5A @TJ=25°C VF 0.44 0.4 IF=2.5A @TJ=25°C VF 0.60 0.6 IF=5A @TJ=25°C 0.56 0.5 0.5 @TJ=25°C IR 70 0 0 @TJ=25°C IR 20 0 0 0 ote2) CJ 307 0 0 0 METER SYMBOL Typ Typ 10000CT 10000CT 10000CT	VBR 110 (minimun) - IF=1.0A @TJ=25°C 0.43 0.46 IF=1.0A @TJ=125°C VF 0.33 0.35 IF=2.5A @TJ=25°C VF 0.50 0.53 IF=2.5A @TJ=25°C VF 0.44 0.47 IF=5A @TJ=25°C VF 0.60 0.64 IF=5A @TJ=25°C IF 0.56 0.59 @TJ=25°C IR 70 0.59 @TJ=25°C IR 20 0.50 0.59 @TJ=25°C CJ 307 307 100 100 METER SYMBOL Typ Typ 100 100 110	

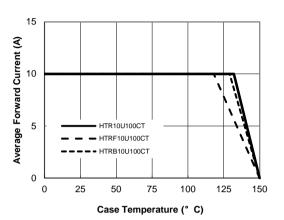
NOTES:1.300us pulse width,2% duty cycle.

2.Measured at 1.0 MHz and applied reverse voltage of 5.0V DC.

3. Thermal resistance junction to case.

RATING AND CHARACTERTIC CURVES

HTR10U100CT, HTRF10U100CT HTRB10U100CT HTRI10U100CT.





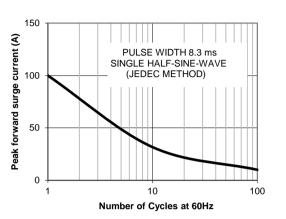


Figure 2. Maximum NON-Repetitive Surge

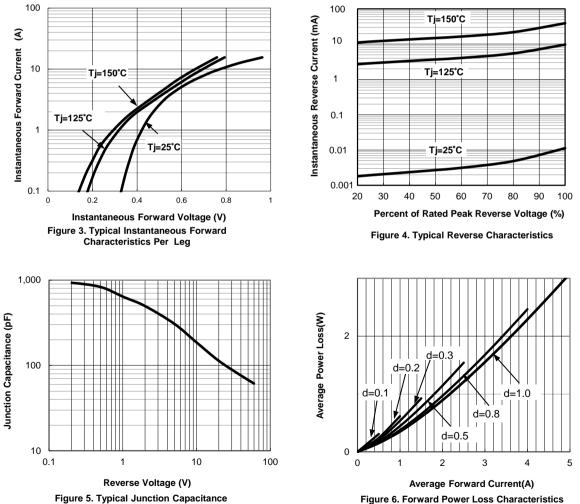


Figure 6. Forward Power Loss Characteristics

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Rev.1, 1-Mar-2017

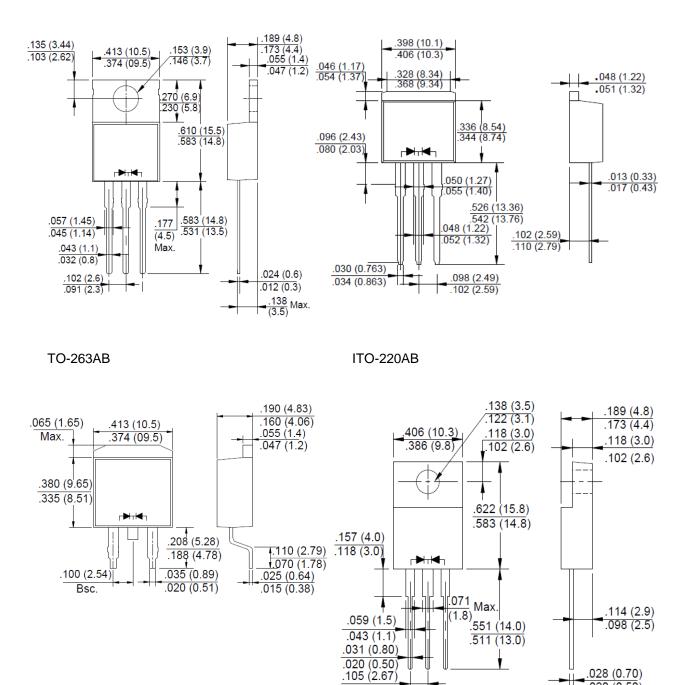
PACKAGE OUTLINE DIMENSIONS in millimeters

HTRF10U100CT HTR10U100CT, HTRB10U100CT HTRI10U100CT,



TO-220AB

TO-262AA



.095 (2.41)

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.028 (0.70) .020 (0.50)



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