



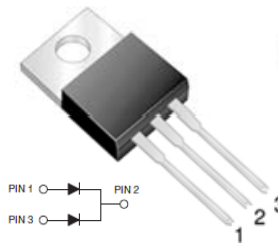
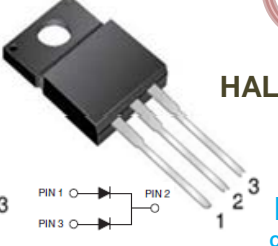
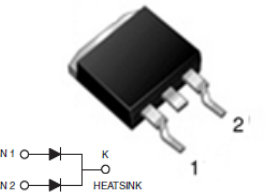
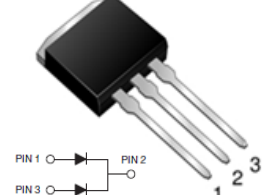


HTR20200CT, HTRF20200CT
HTRI20200CT, HTRB20200CT

HY ELECTRONIC (CAYMAN) LIMITED

www.hygroup.com.tw

Ultra Low VF=0.62V at IF=5A

SCHOTTKY BARRIER RECTIFIERS	REVERSE VOLTAGE	200	Volts	
	FORWARD CURRENT	20	Amperes	
FEATURES ●Metal of silicon rectifier , majority carrier conduction ●Trench Schottky Technology ●Low power loss, high efficiency ●High current capability, low VF ●High surge capability ●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	TO-220AB	ITO-220AB	 HALOGEN FREE  RoHS COMPLIANT	
	 HTR20200CT	 HTRF20200CT		
		TO-263AB	TO-262AA	
		 HTRB20200CT	 HTRI20200CT	

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 RATINGS (T_A = 25 °C unless otherwise noted)

CHARACTERISTICS	SYMBOL	HTR20200CT, HTRF20200CT, HTRI20200CT, HTRB20200CT	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	200	V
Maximum RMS Voltage	V _{RMS}	141	V
Maximum DC Blocking Voltage	V _{DC}	200	V
Maximum Average Forward Rectified Current (See Fig.1)	I _(AV)	20	A
Maximum Average Forward Rectified Current (Per Leg)		10	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load	I _{FSM}	120	A
Operating Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +175	°C

ELECTRICAL CHARACTERISTICS (T_A = 25 °C unless otherwise noted)

PARAMETER / CONDITIONS	SYMBOL	Typ	Max	UNIT	
Breakdown voltage per diode	V _{BR}	205 (minimum)	-	V	
Forward Voltage (Note1)	V _F	IF=5A @TJ=25°C	0.95	1.05	V
		IF=5A @TJ=125°C	0.62	0.67	
		IF=10A @TJ=25°C	1.49	1.60	
		IF=10A @TJ=125°C	0.74	0.79	
Maximum DC Reverse Current @TJ=25°C	I _R		69	uA	
at Rated DC Bolcking Voltage @TJ=125°C			41	mA	
Typical Junction Capacitance (Note2)	C _J	110		pF	

THERMAL CHARACTERISTICS (T_A = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	Typ				UNIT
		HTR20200CT	HTRF20200CT	HTRI20200CT	HTRB20200CT	
Thermal Resistance Per Diode (Note3)	R _{θJC}	3.0	5.5	3.5	3.5	°C/W

NOTES:1.300us pulse width,2% duty cycle.
 2.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
 3.Thermal resistance junction to case.

RATING AND CHARACTERISTIC CURVES

HTR20200CT, HTRF20200CT

HTRI20200CT, HTRB20200CT

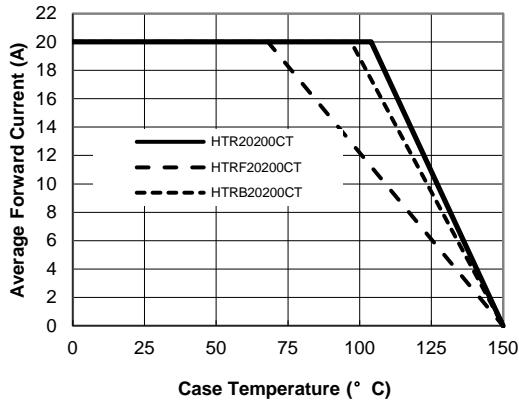


Figure 1. Forward Current Derating Curve

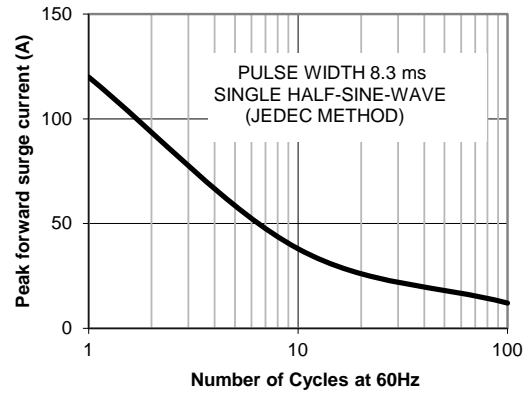


Figure 2. Maximum NON-Repetitive Surge

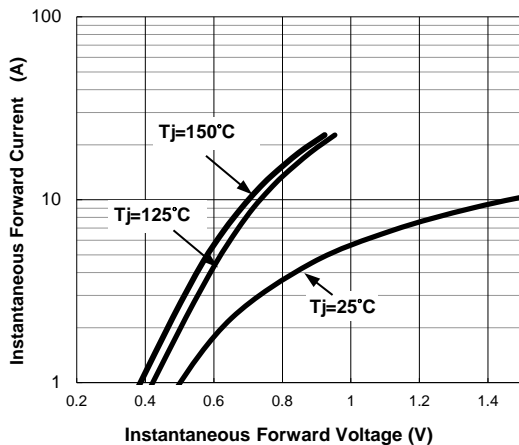


Figure 3. Typical Instantaneous Forward Characteristics Per Leg

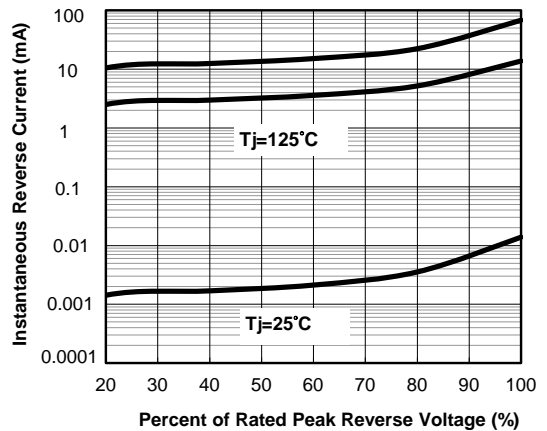


Figure 4. Typical Reverse Characteristics

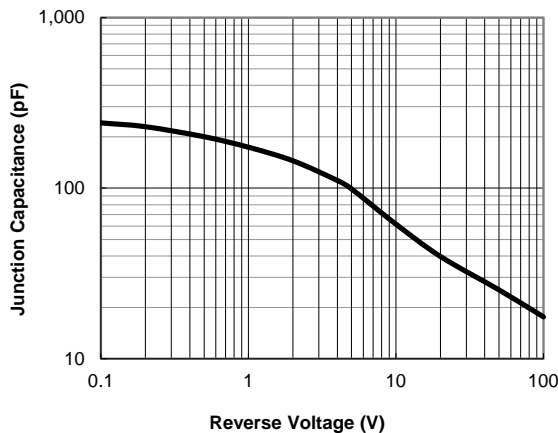


Figure 5. Typical Junction Capacitance

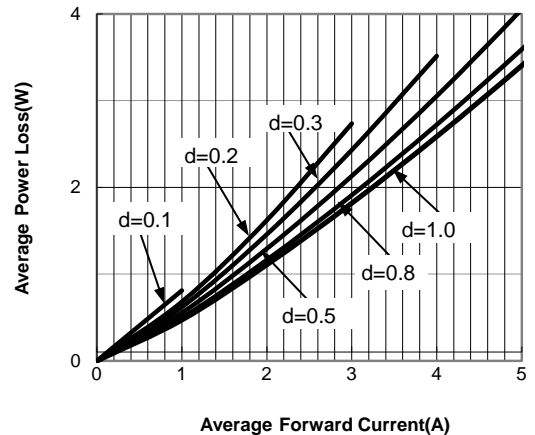


Figure 6. Forward Power Loss Characteristics

PACKAGE OUTLINE DIMENSIONS in millimeters

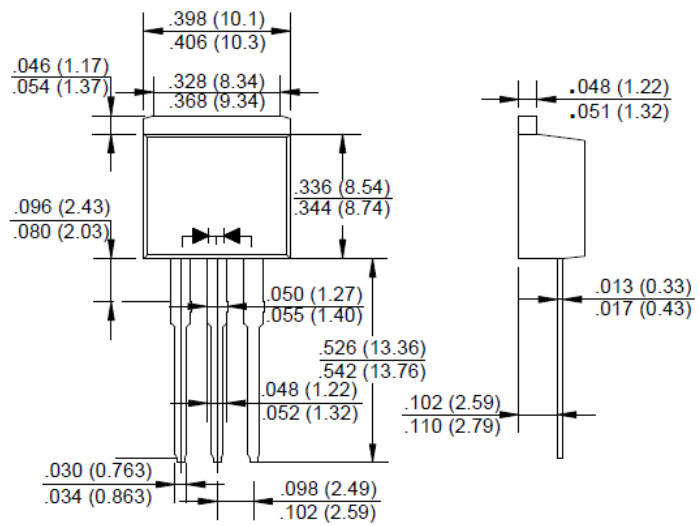
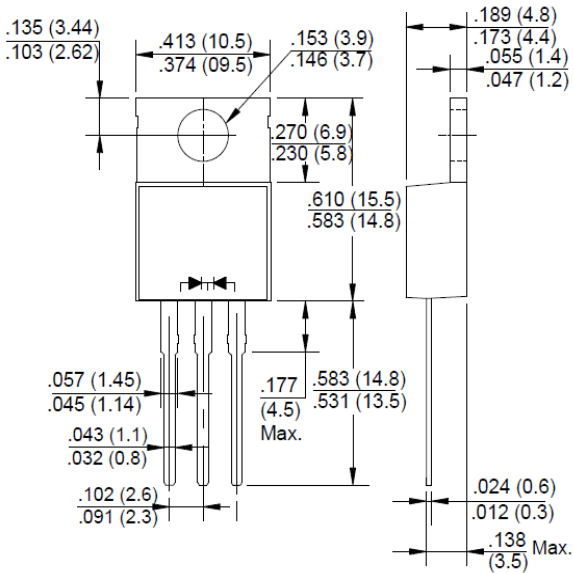
HTR20200CT, HTRF20200CT

HTRI20200CT, HTRB20200CT



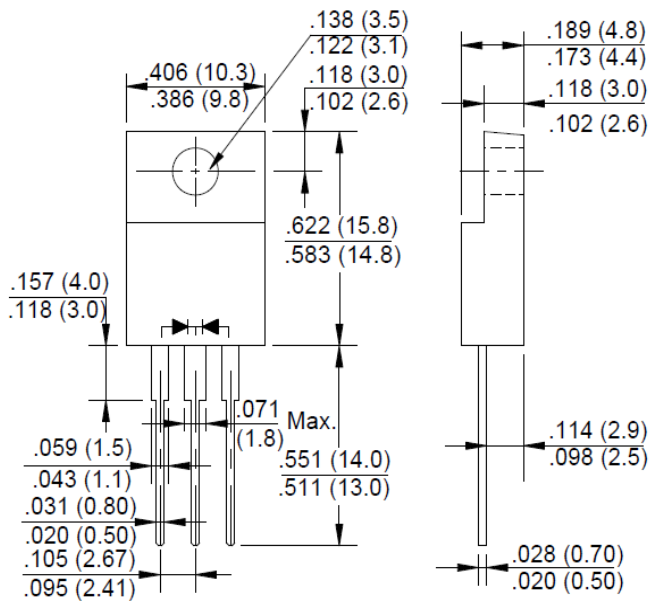
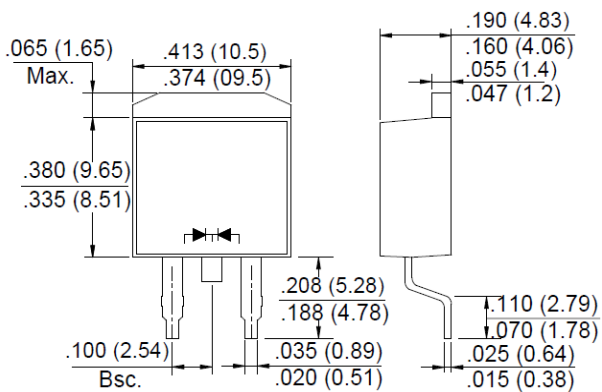
TO-220AB

TO-262AA



TO-263AB

ITO-220AB



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