

**HIGH EFFICIENCY RECTIFIER**

**VOLTAGE RANGE 50 to 600 Volts CURRENT 16.0 Amperes**

**FEATURES**

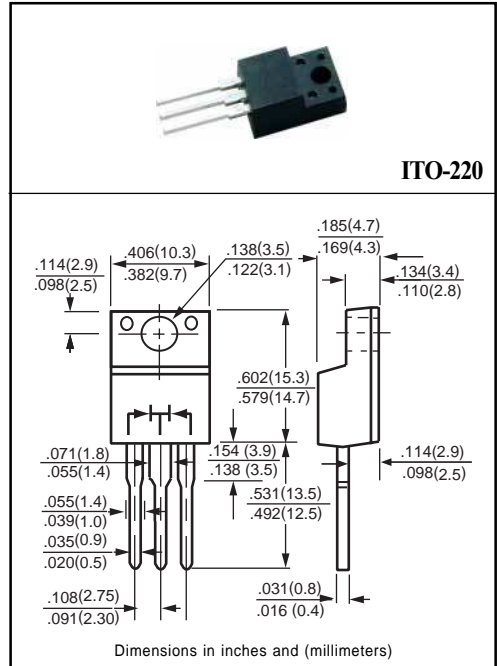
- \* Low power loss, high efficiency
- \* Low forward voltage drop
- \* Low thermal resistance
- \* High current capability
- \* High speed switching
- \* High surge capability
- \* High reliability

**MECHANICAL DATA**

- \* Case: ITO-220 molded plastic
- \* Epoxy: Device has UL flammability classification 94V-O
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 2.24 grams
- \* Polarity: As marked

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.



**MAXIMUM RATINGS** (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	IHER1601C	IHER1602C	IHER1603C	IHER1604C	IHER1605C	IHER1606C	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	300	400	600	Volts
Maximum RMS Voltage	VRMS	35	70	140	210	280	420	Volts
Maximum DC Blocking Voltage	Vbc	50	100	200	300	400	600	Volts
Maximum Average Forward Rectified Current at Tc = 75°C	IO	16.0						Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	200						Amps
Typical Thermal Resistance	RθJC	2.5						°C/W
Typical Junction Capacitance (Note 2)	CJ	40						pF
Operating and Storage Temperature Range	TJ, TSTG	-55 to + 150						°C

**ELECTRICAL CHARACTERISTICS** (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	IHER1601C	IHER1602C	IHER1603C	IHER1604C	IHER1605C	IHER1606C	UNITS
Maximum Instantaneous Forward Voltage at 8.0A DC	VF	1.0			1.3		1.7	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	10						uAmps
		150						
Maximum Reverse Recovery Time (Note 1)	trr	50					75	nSec

NOTES : 1. Test Conditions: IF = 0.5A, IR = -1.0A, IRR = -0.25A  
 2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.  
 3. Suffix "A" = Common Anode.

# RATING AND CHARACTERISTIC CURVES ( IHER1601C THRU IHER1606C )

