



# HERF1601CT thru HERF1608CT

**HIGH EFFICIENCY GLASS PASSIVATED RECTIFIERS**

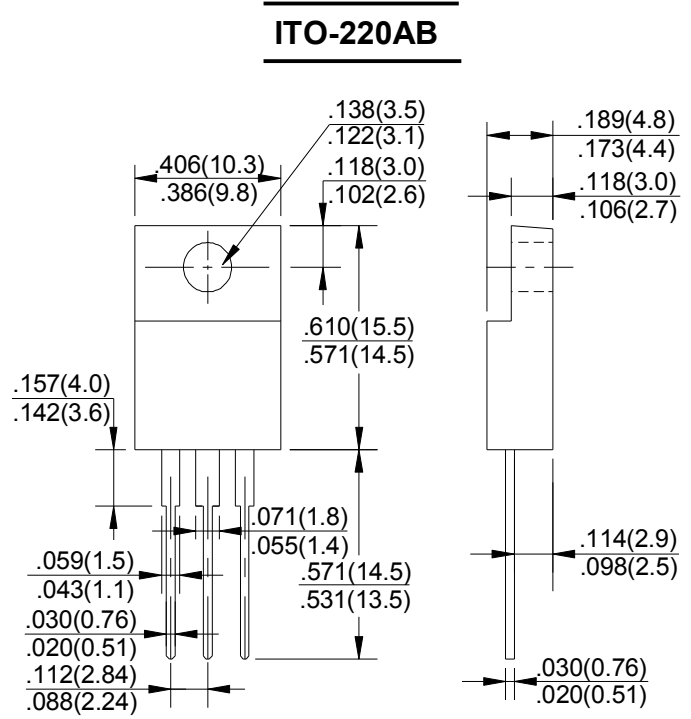
REVERSE VOLTAGE - 50 to 1000Volts  
FORWARD CURRENT - 16.0 Amperes

## FEATURES

- Low power loss; high efficiency
- Low forward voltage drop
- Low thermal resistance
- High current capability
- High speed switching
- High reliability

## MECHANICAL DATA

- Case: ITO-220AB molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: MIL-STD-202E method 208C guaranteed
- Mounting position :Any
- Weight: 2.24 grams
- polarity:As marked



## 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%

CHARACTERISTICS	SYMBOL	HERF 1601CT	HERF 1602CT	HERF 1603CT	HERF 1604CT	HERF 1605CT	HERF 1606CT	HERF 1607CT	HERF 1608CT	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current @TA =75 °C	Io	16.0								A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	IFSM	300								A
Typical Thermal Resistance	RθJA	2.5								°C/W
Typical Junction Capacitance (Note2)	CJ	40								pF
Peak Forward Voltage at 8.0A DC	VF	1.0		1.3		1.7				V
Maximum DC Reverse Current @TJ=25°C at Rated DC Blocking Voltage @TJ=100°C	IR	10								μA
		150								
Maximum Reverse Recovery Time(Note1)	TRR	60								nS
Operating and Storage Temperature Range	TJ,TSTG	-55 to + 150								°C

NOTES:1.Measured with IF=0.5A,IR=1A,I<sub>RR</sub>=0.25A  
2.Measured at 1.0 MHZ and applied reverse voltage of 4.0VDC.

**RATING AND CHARACTERISTIC CURVES**  
**HERF1601CT thru HERF1608CT**



FIG.1- TYPICAL FORWARD CURRENT DERATING CURVE

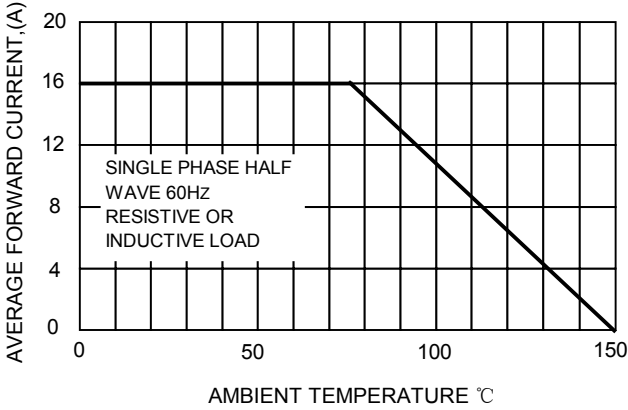


FIG.2-TYPICAL REVERSE CHARACTERISTICS

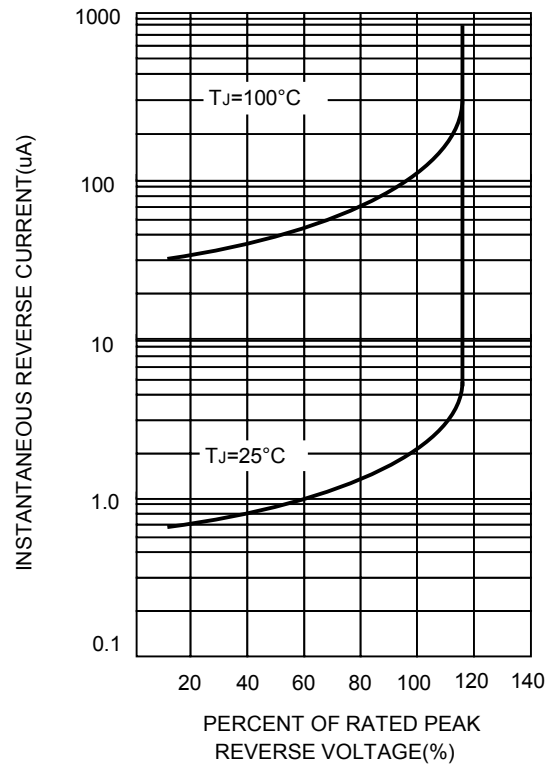


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

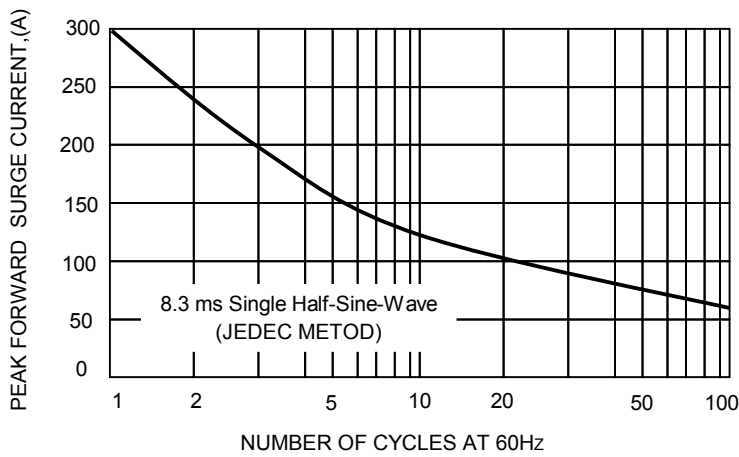


FIG.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

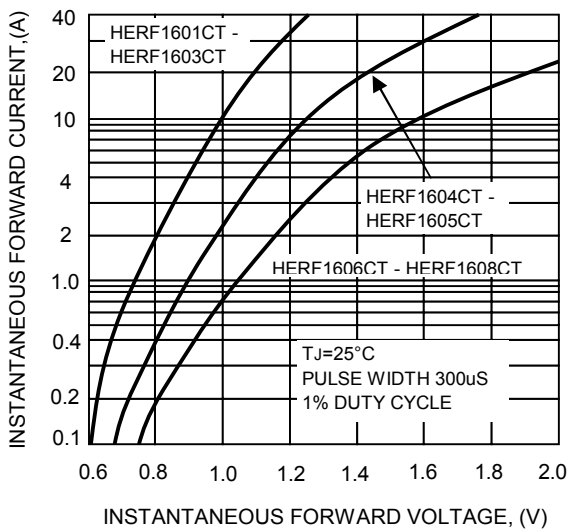


FIG.5-TYPICAL JUNCTION CAPACITANCE

