



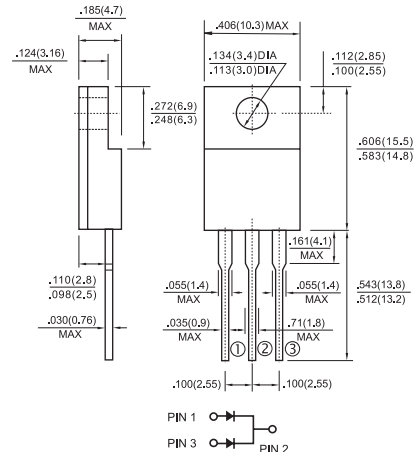
### ITO-220AB

### Features

- ✦ Glass passivated chip junction.
- ✦ High efficiency, Low VF
- ✦ High current capability
- ✦ High reliability
- ✦ High surge current capability
- ✦ For use in low voltage, high frequency inverter, free wheeling, and polarity protection application.

### Mechanical Data

- ✦ Cases: ITO-220AB molded plastic
- ✦ Epoxy: UL 94V0 rate flame retardant
- ✦ Polarity: As marked
- ✦ High temperature soldering guaranteed:  
260°C/ 0.25" (6.35mm) from case for 10 seconds
- ✦ Mounting torque: 5 in – 1bs. max.
- ✦ Weight: 2.24 grams



Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

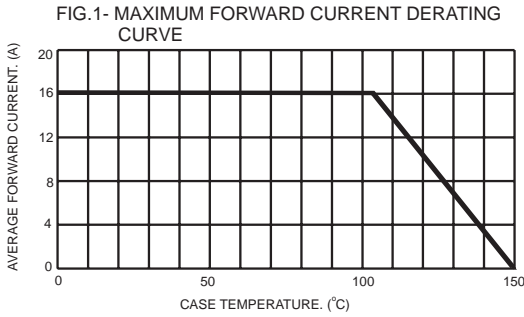
Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

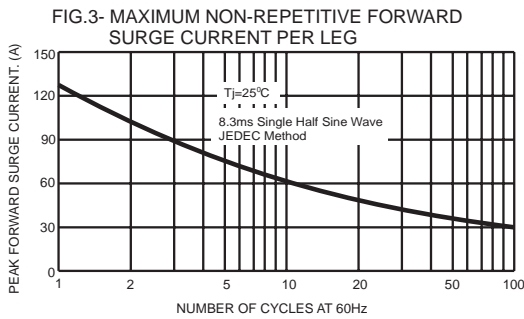
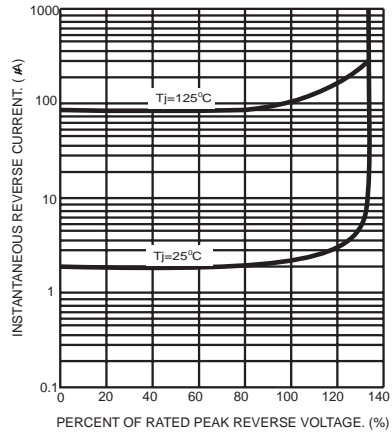
Type Number	Symbol	HERF	HERF	HERF	HERF	HERF	HERF	HERF	HERF	Units
		1601G	1602G	1603G	1604G	1605G	1606G	1607G	1608G	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_C = 100^\circ C$	$I_{(AV)}$	16								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	$I_{FSM}$	125								A
Maximum Instantaneous Forward Voltage @8.0A	$V_F$	1.0		1.3		1.7			V	
Maximum DC Reverse Current @ $T_A = 25^\circ C$ at Rated DC Blocking Voltage @ $T_A = 125^\circ C$	$I_R$	10 400								$\mu A$ $\mu A$
Typical Reverse Recovery Time ( Note 1 )	$T_{rr}$	50				80			nS	
Typical Junction Capacitance ( Note 2 )	$C_j$	80				50			pF	
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$	1.5								$^\circ C/W$
Operating Temperature Range	$T_J$	-65 to +150								$^\circ C$
Storage Temperature Range	$T_{STG}$	-65 to +150								$^\circ C$

- Notes:
1. Reverse Recovery Test Conditions:  $I_F = 0.5A$ ,  $I_R = 1.0A$ ,  $I_{RR} = 0.25A$
  2. Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.
  3. Mounted on Heatsink Size of 4 in x 6 in x 0.25 in Al-Plate.

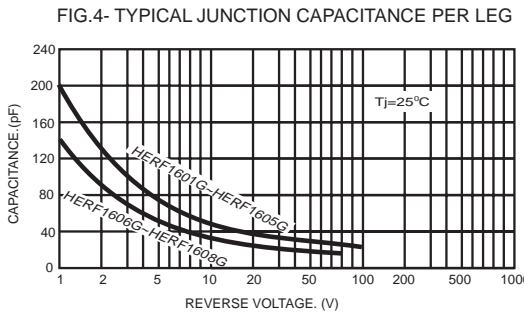
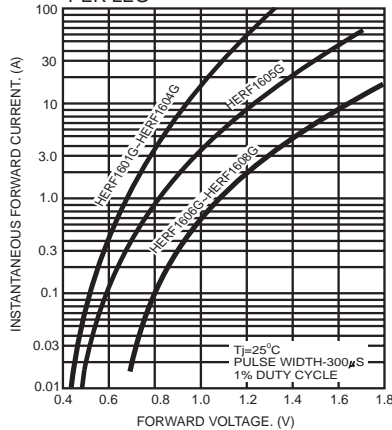
### RATINGS AND CHARACTERISTIC CURVES (HERF1601G THRU HERF1608G)



**FIG.2- TYPICAL REVERSE CHARACTERISTICS PER LEG**



**FIG.5- TYPICAL FORWARD CHARACTERISTICS PER LEG**



**FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**

