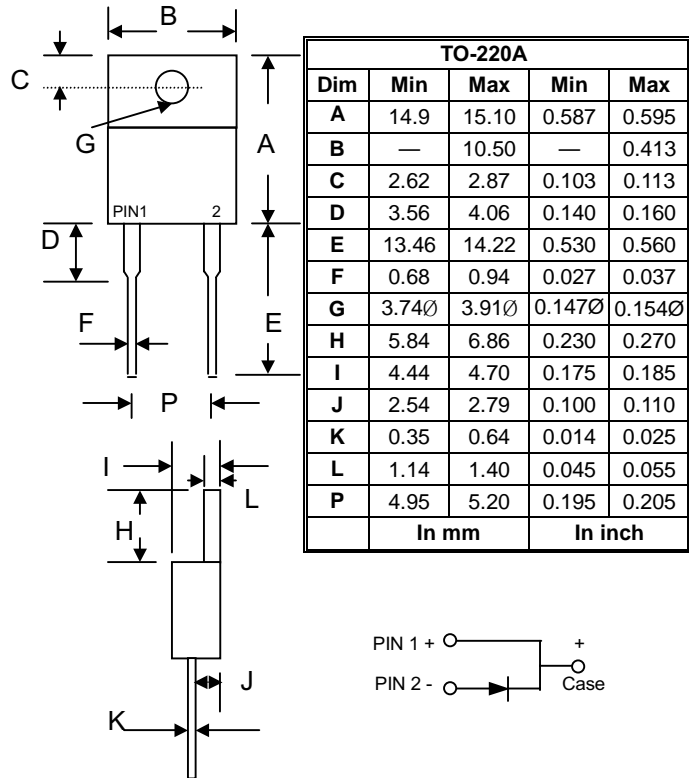


Features

- Glass Passivated Die Construction
- Ultra-Fast Switching
- High Current Capability
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-O
- Green Products in Compliance with the RoHS Directive

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 2.24 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	HER	HER	HER	HER	HER	HER	HER	HER	Unit	
		1601G-G	1602G-G	1603G-G	1604G-G	1605G-G	1606G-G	1607G-G	1608G-G		
Peak Repetitive Reverse Voltage	V _{RRM}									V	
Working Peak Reverse Voltage	V _{RWM}	50	100	200	300	400	600	800	1000		
DC Blocking Voltage	V _R										
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	210	280	420	560	700	V	
Average Rectified Output Current @T _C = 105°C	I _O	16								A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	250								A	
Forward Voltage @I _F = 16A	V _{FM}		1.0			1.3	1.7			V	
Peak Reverse Current @T _A = 25°C	I _{RM}	10								μA	
At Rated DC Blocking Voltage @T _A = 125°C		400									
Reverse Recovery Time (Note 1)	t _{rr}	50					80				nS
Typical Junction Capacitance (Note 2)	C _j	170					130				pF
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150								°C	

Note: 1. Measured with I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A. See figure 1.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

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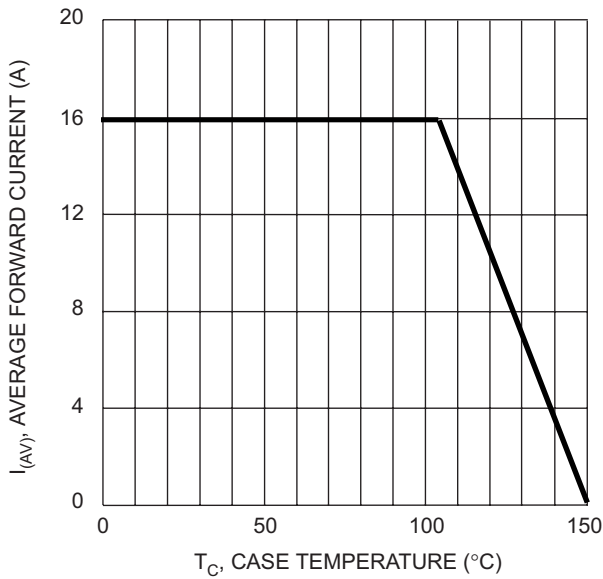


Fig. 1 Forward Current Derating Curve

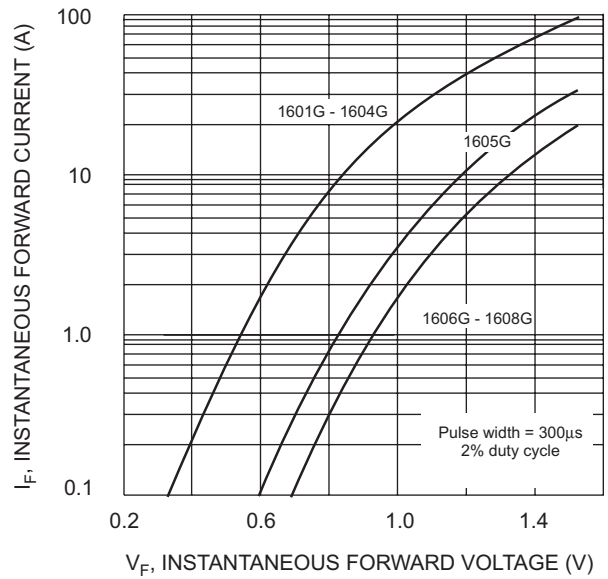


Fig. 2 Typical Forward Characteristics

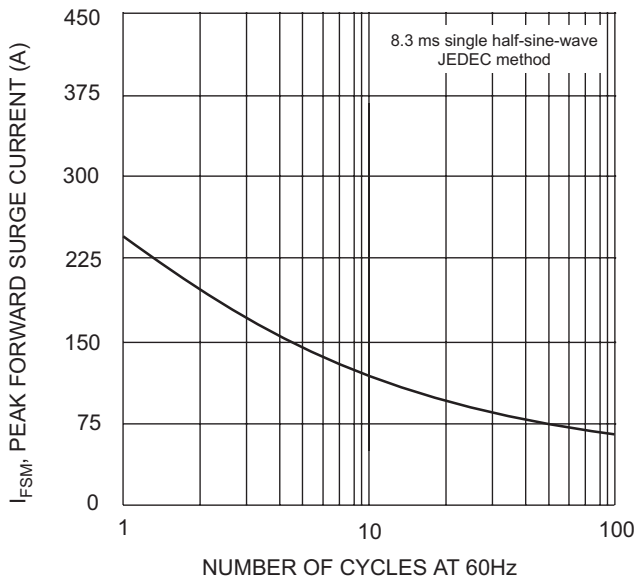


Fig. 3 Maximum Non-Repetitive Surge Current

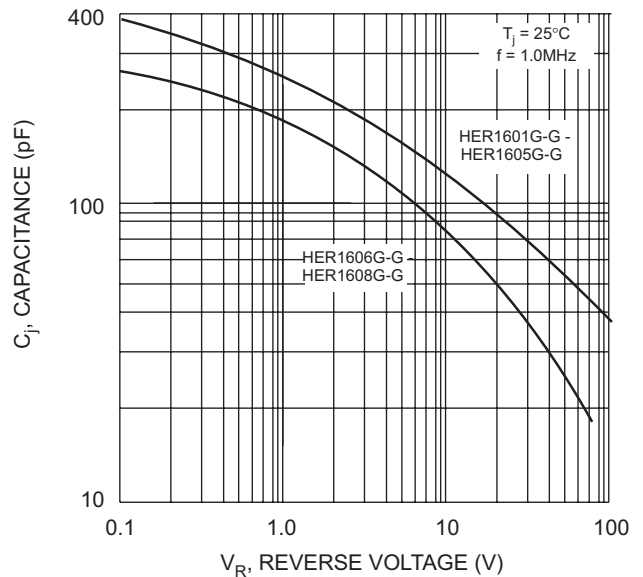
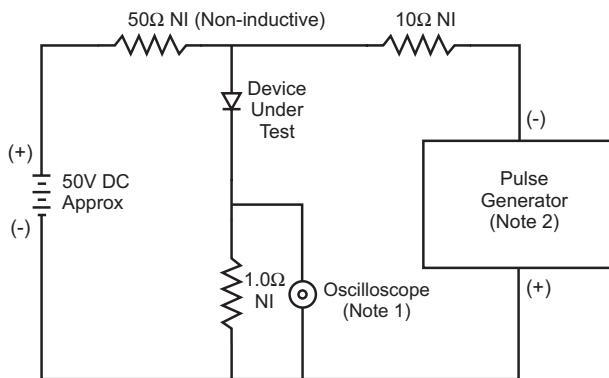
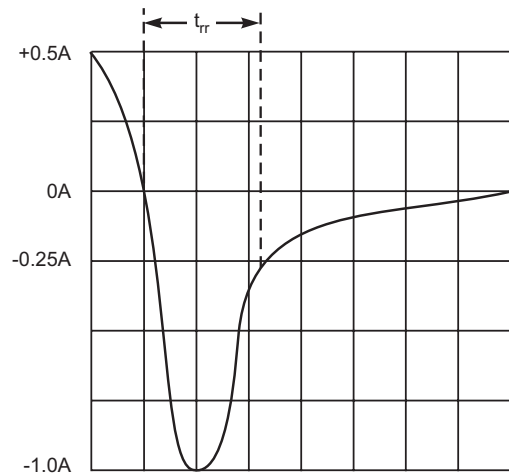


Fig. 4 Typical Junction Capacitance



- Notes:
 1. Rise Time = 7.0ns max. Input Impedance = 1.0MΩ, 22pF.
 2. Rise Time = 10ns max. Input Impedance = 50Ω.



Set time base for 5/10ns/cm

Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

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