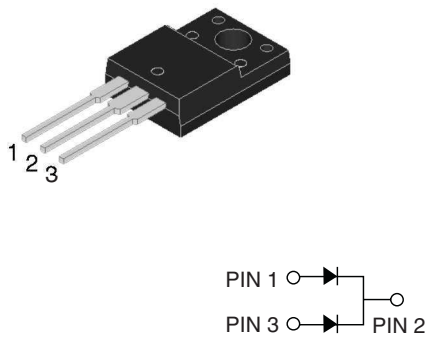


16.0 Amp. Glass Passivated Ultrafast Rectifiers

| | |
|---|--|
| <p>ITO-220AB</p>  | <p>Voltage 200 to 1000 V</p> <p>Current 16.0 A</p> <ul style="list-style-type: none"> 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. <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> Case: ITO-220AB Molded plastic Epoxy: UL 94V0 rate flame retardant Terminals: Pure tin plated, Lead free, solderable per MIL-STD-202, Method 208 guaranteed Polarity: As marked High temperature soldering guaranteed: 260 °C/6.35mm from case for 10 seconds Mounting torque: 5 in - 1bs. max. Weight: 2.24 grams |
|---|--|

Absolute Maximum Ratings, according to IEC publication No. 134

| | | HERF 1603G | HERF 1605G | HERF 1606G | HERF 1607G | HERF 1608G |
|--------------------|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| V _{RRM} | Maximum Recurrent Peak Reverse Voltage (V) | 200 | 400 | 600 | 800 | 1000 |
| V _{RMS} | Maximum RMS Voltage (V) | 140 | 280 | 420 | 560 | 700 |
| V _{DC} | Maximum DC Blocking Voltage (V) | 200 | 400 | 600 | 800 | 1000 |
| I _{F(AV)} | Maximum Average Forward Rectified Current @ T _c = 100 °C | 16 A | | | | |
| I _{FSM} | Peak Forward Surge Current 8.3 ms. single Half Sine-wave Superimposed on Rated Load (JEDEC Method) | 125 A | | | | |
| T _{rr} | Maximum Reverse Recovery Time From I _F = 0.5 A; I _R = 1 A; I _{RR} = 0.25 A | 50 nS | | 80 nS | | |
| C _j | Typical Junction Capacitance at 1MHz and reverse voltage of 4V _{DC} | 80 pF | | 50 pF | | |
| T _j | Operating Temperature Range | - 65 to + 150 °C | | | | |
| T _{stg} | Storage Temperature Range | - 65 to + 150 °C | | | | |

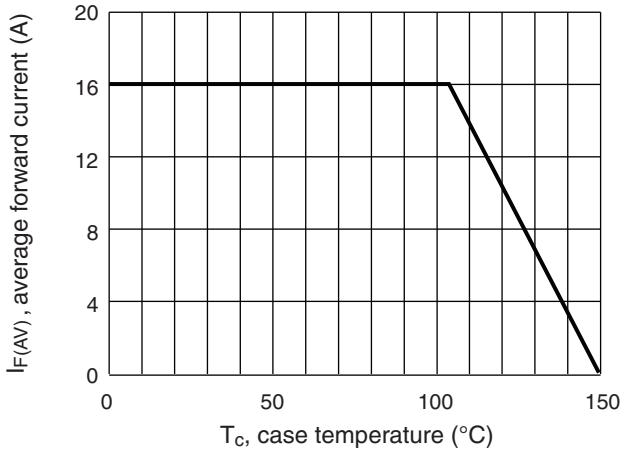
Electrical Characteristics

| | | HERF 1603G | HERF 1605G | HERF 1606G | HERF 1607G | HERF 1608G |
|--------------------|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| V _F | Maximum Instantaneous Forward Voltage @ 8.0 A | 1.0 V | 1.3 V | 1.7 V | | |
| I _R | Maximum DC Reverse Current @ T _A = 25 °C at Rated DC Blocking Voltage @ T _A = 125 °C | 10 µA 400 µA | | | | |
| R _{thj-c} | Typical Thermal Resistance (Note 1) | 1.5 °C/W | | | | |

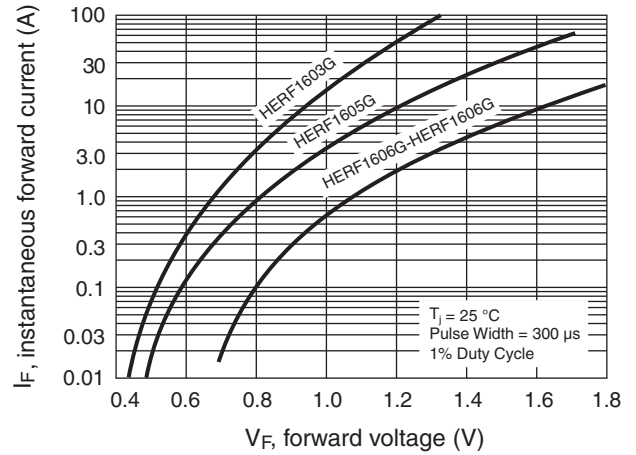
Note: 1. Mounted on Heatsink Size of 101.6 mm x 152.4 mm x 6.35 mm Al-Plate.

Rating And Characteristic Curves

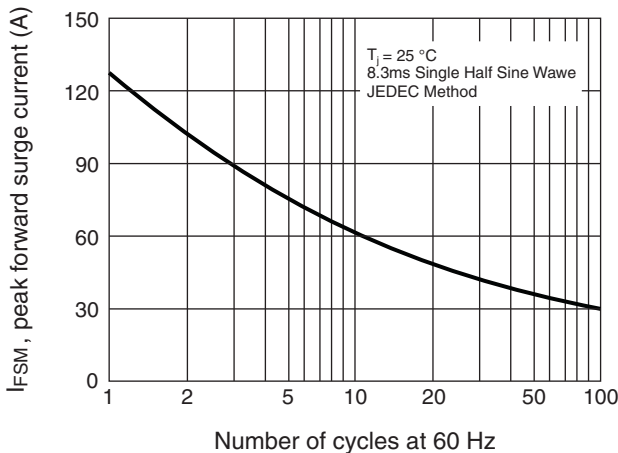
MAXIMUM FORWARD CURRENT DERATING CURVE



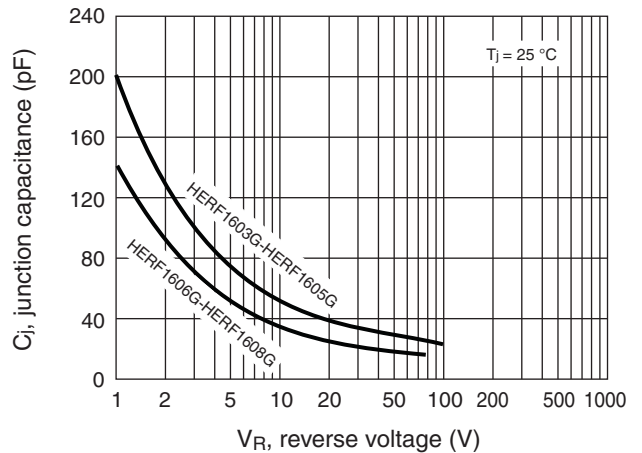
TYPICAL FORWARD CHARACTERISTICS PER LEG



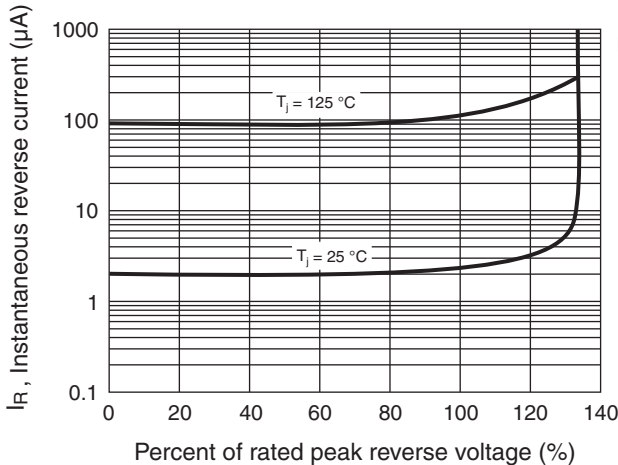
MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG



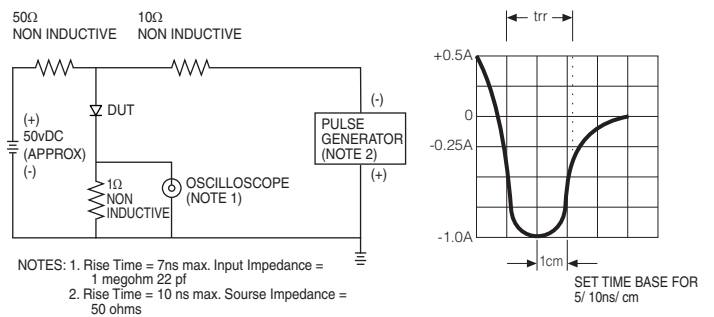
TYPICAL JUNCTION CAPACITANCE PER LEG



TYPICAL REVERSE CHARACTERISTICS PER LEG



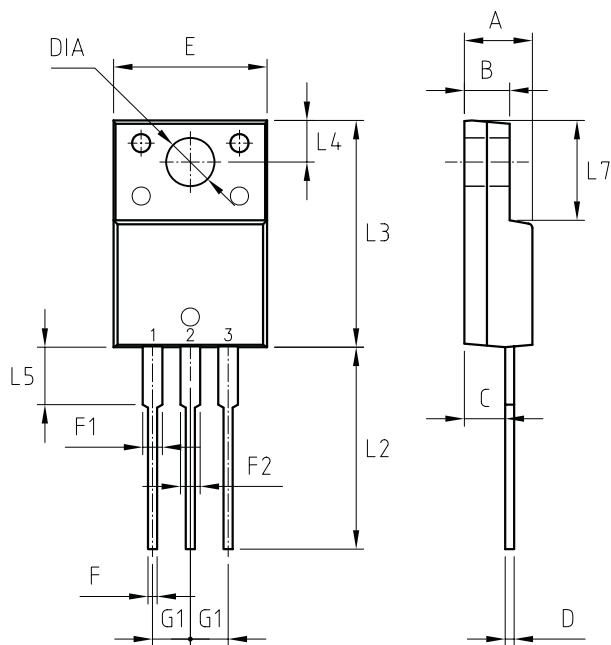
REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



16.0 Amp. Glass Passivated Ultrafast Rectifiers

PACKAGE MECHANICAL DATA

ITO-220AB



| REF. | DIMENSIONS | | |
|------|-------------|---------|------|
| | Millimeters | | |
| | Min. | Nominal | Max. |
| A | - | - | 4.7 |
| B | - | - | 3.16 |
| C | 2.5 | - | 2.8 |
| D | - | - | 0.76 |
| E | - | - | 10.3 |
| F | - | - | 0.9 |
| F1 | - | - | 1.4 |
| F2 | - | - | 1.8 |
| G1 | - | 2.55 | - |
| L2 | 13.2 | - | 13.8 |
| L3 | 14.8 | - | 15.5 |
| L4 | 2.55 | - | 2.85 |
| L5 | - | - | 4.1 |
| L7 | 6.3 | - | 6.9 |
| DIA | 3.0 | - | 3.4 |