

**SURFACE MOUNT**  
**GPP TRANSIENT VOLTAGE SUPPRESSOR**  
**600 WATT PEAK POWER 1.0 WATT STEADY STATE**

**FEATURES**

- \* Plastic package has underwriters laboratory
- \* Glass passivated chip construction
- \* 600 watt surge capability at 1ms
- \* Excellent clamping capability
- \* Low zener impedance
- \* Fast response time

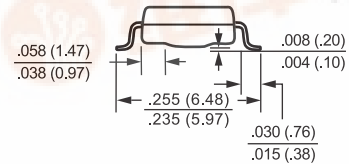
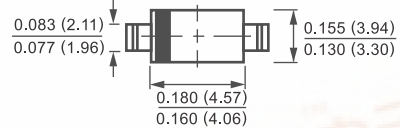
Ratings at 25 °C ambient temperature unless otherwise specified.

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.



**DO-214AA**  
**GULL WING**



Dimensions in inches and (millimeters)

**DEVICES FOR BIPOLAR APPLICATIONS**

**TFMBG150A**

**Electrical characteristics**

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

| RATINGS                                                                                                                         | SYMBOL   | VALUE        | UNITS |
|---------------------------------------------------------------------------------------------------------------------------------|----------|--------------|-------|
| Peak Power Dissipation with a 10/1000uS (Note 1,2, Fig.1)                                                                       | PPPM     | Minimum 600  | Watts |
| Peak Pulse Current with a 10/1000uS waveform ( Note 1, Fig.3 )                                                                  | IPPM     | SEE TABLE 1  | Amps  |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) (Note 2,3) unidirectional only | IFSM     | 100          | Amps  |
| Maximum Instantaneous Forward Voltage at 50A for unidirectional only                                                            | VF       | 5.0          | Volts |
| Operating and Storage Temperature Range                                                                                         | TJ, TSTG | -55 to + 150 | °C    |

- NOTES : 1. Non-repetitive current pulse, per Fig.3 and derated above TA = 25°C per Fig.2.  
2. Mounted on 0.2 X 0.2" ( 5.0 X 5.0mm ) copper pad to each terminal.  
3. Measured on 8.3ms single half sine-wave duty cycle = 4 pules per minute maximum.

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## RATING AND CHARACTERISTIC CURVES ( TFMBG150A )

FIG. 1 - PEAK PULSE POWER RATING CURVE

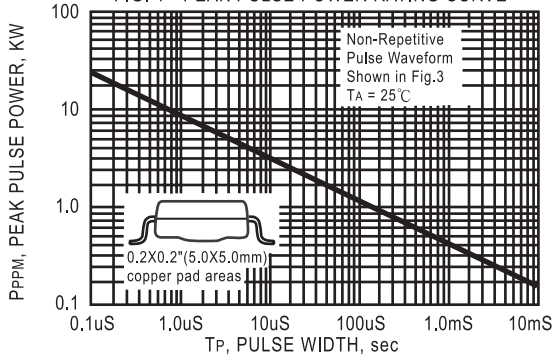


FIG. 3 - PULSE WAVEFORM

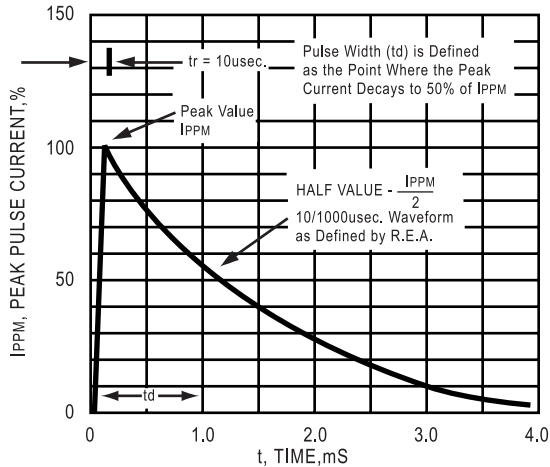


FIG. 5 - TYPICAL JUNCTION CAPACITANCE BIDIRECTIONAL

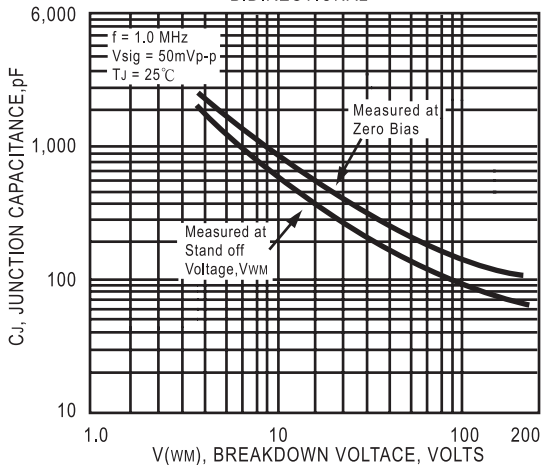


FIG. 2 - PULSE DERATING CURVE

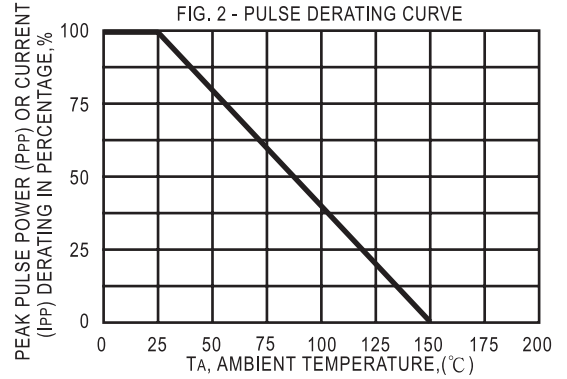


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

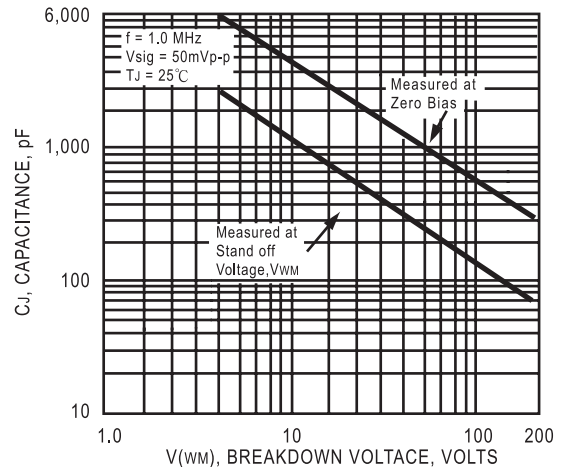
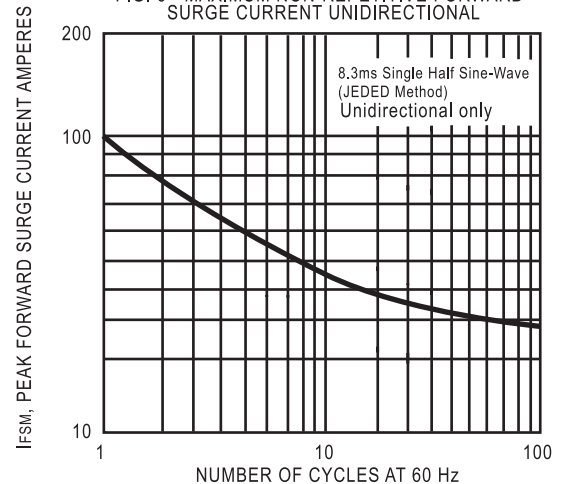


FIG. 6 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT UNIDIRECTIONAL



## TRANSIENT VOLTAGE SUPPRESSORS

## 600W SERIES TVS DIODES / DO-214AA ( CASE 3 ) 600W

[illegible]