

DI100S THRU DI1012S

Glass passivated type

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing Flame Retardant Epoxy Molding Compound.
- For surface mounted applications.
- Exceeds environmental standards of MIL-S-19500 / 228
- High surge current capability
- Ideal for printed circuit board

Mechanical data

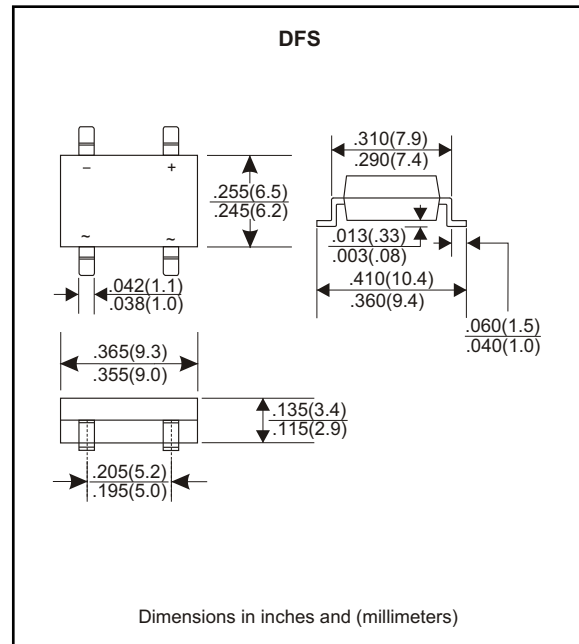
Case : Molded plastic, DFS

Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

Polarity : Marked on body

Mounting Position : Any

Weight : 1.0 gram



MAXIMUM RATINGS (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)

| PARAMETER | CONDITIONS | Symbol | MIN. | TYP. | MAX. | UNIT |
|---------------------------|---|-----------|------|------|------|--------------------|
| Forward rectified current | See Fig.1 | I_0 | | | 1.0 | A |
| Forward surge current | 8.3ms single half sine-wave superimposed on rate load (JEDEC methode) | I_{FSM} | | | 50 | A |
| Reverse current | $V_R = V_{RRM}$ $T_A = 25^{\circ}\text{C}$ | I_R | | | 10 | μA |
| | $V_R = V_{RRM}$ $T_A = 125^{\circ}\text{C}$ | | | | 500 | μA |
| Storage temperature | | T_{STG} | -55 | | +150 | $^{\circ}\text{C}$ |

| SYMBOLS | MARKING CODE | V_{RRM}^{*1} (V) | V_{RMS}^{*2} (V) | V_R^{*3} (V) | V_F^{*4} (V) | Operating temperature ($^{\circ}\text{C}$) |
|---------|--------------|-----------------------|-----------------------|-------------------|-------------------|---|
| DI100S | DI100S | 50 | 35 | 50 | 1.1 | -55 to +125 |
| DI101S | DI101S | 100 | 70 | 100 | | |
| DI102S | DI102S | 200 | 140 | 200 | | |
| DI104S | DI104S | 400 | 280 | 400 | | |
| DI106S | DI106S | 600 | 420 | 600 | | |
| DI108S | DI108S | 800 | 560 | 800 | | |
| DI1010S | DI1010S | 1000 | 700 | 1000 | | |
| DI1012S | DI1012S | 1200 | 840 | 1200 | | |

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage

RATING AND CHARACTERISTIC CURVES (DI100S THRU DI1012S)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

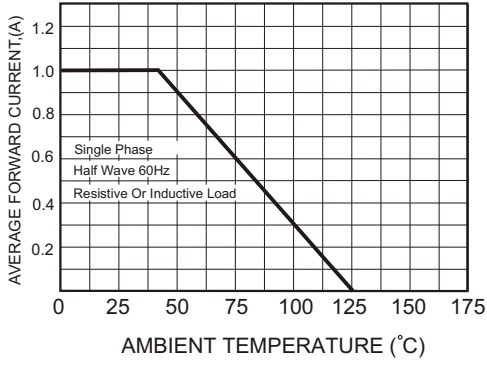


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

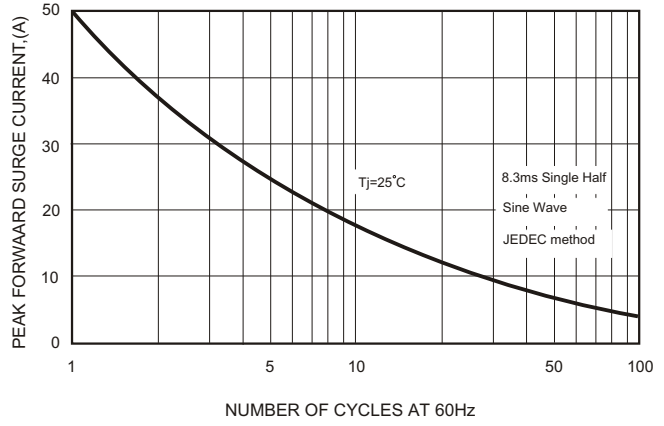


FIG.3-TYPICAL FORWARD CHARACTERISTICS

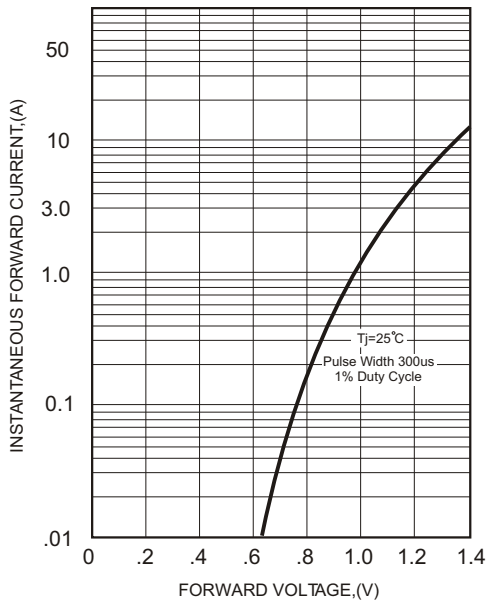


FIG.4-TYPICAL REVERSE CHARACTERISTICS

