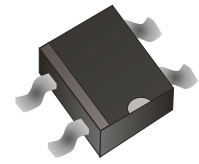


DF2005S-G Thru. DF210S-G

Reverse Voltage: 50 to 1000V

Forward Current: 2.0A

RoHS Device

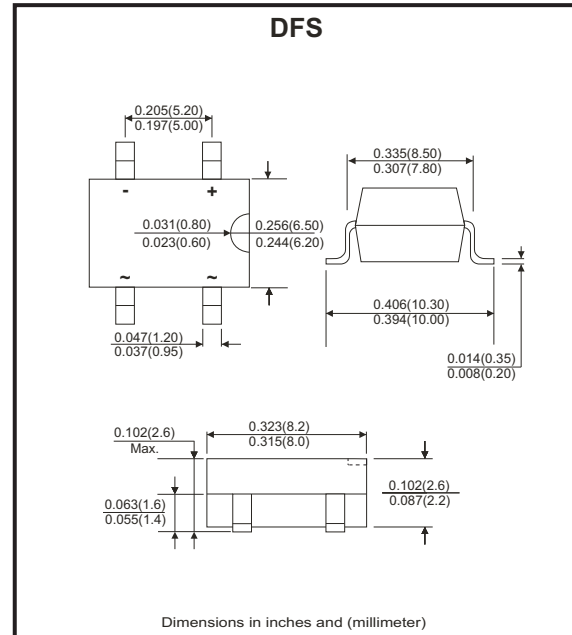


Features

- Rating to 1000V PRV
- Ideal for printed circuit board.
- Low forward voltage drop.
- High current capability.
- The plastic material has UL flammability classification 94V-0
- UL recognized file # E217139

Mechanical Data

- Polarit: As marked on Body
- Weight: 0.02 ounces, 0.38 grams
- Mounting position: Any



Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave ,60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%

| Parameter | Symbol | DF 2005S-G | DF 201S-G | DF 202S-G | DF 204S-G | DF 206S-G | DF 208S-G | DF 210S-G | Unit |
|--|-----------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|---------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current @ $T_A=40^{\circ}C$ | $I_{(AV)}$ | 2.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method) | I_{FSM} | 60 | | | | | | | A |
| Maximum Forward Voltage at 2.0A DC | V_F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current @ $T_J=25^{\circ}C$ At Rate DC Blocking Voltage @ $T_J=125^{\circ}C$ | I_R | 10 500 | | | | | | | μA |
| I^2T Rating for Fusing ($t<8.3ms$) | I^2t | 10.4 | | | | | | | A^2s |
| Typical Junction Capacitance Per Element (Note 1) | C_J | 25 | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | $R_{\theta JA}$ | 40 | | | | | | | $^{\circ}C/W$ |
| Operating Temperature Range | T_J | -55 to +150 | | | | | | | $^{\circ}C$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | $^{\circ}C$ |

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal resistance from junction to ambient mounted on P.C.B with 0.5*0.5"(13*13mm) copper pads.

Company reserves the right to improve product design , functions and reliability without notice.

REV: F

Rating and Characteristics Curves (DF2005S-G Thru. DF210S-G)

Fig.1 - Derating Curve For Output Rectified Current

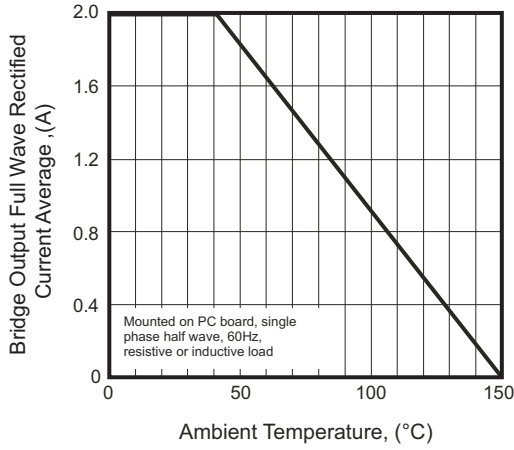


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

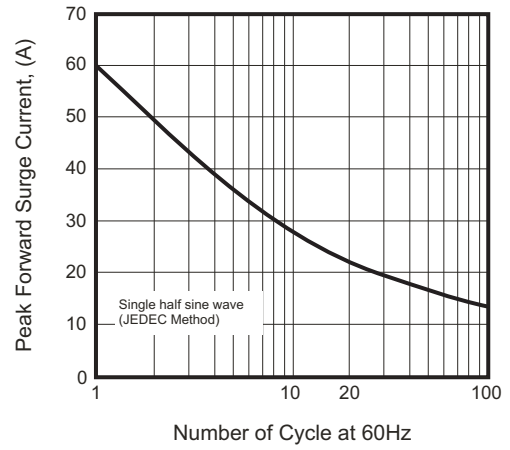


Fig.3 - Typical Junction Capacitance

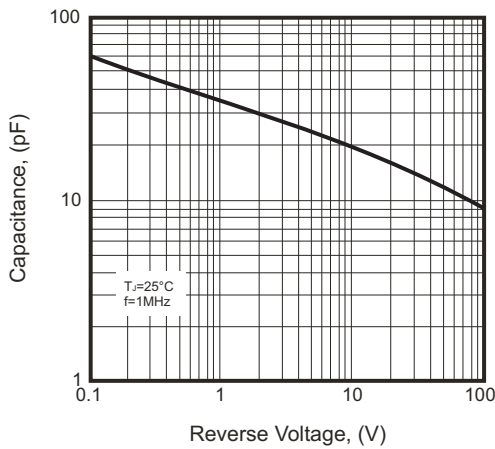


Fig.4 - Typical Forward Characteristics

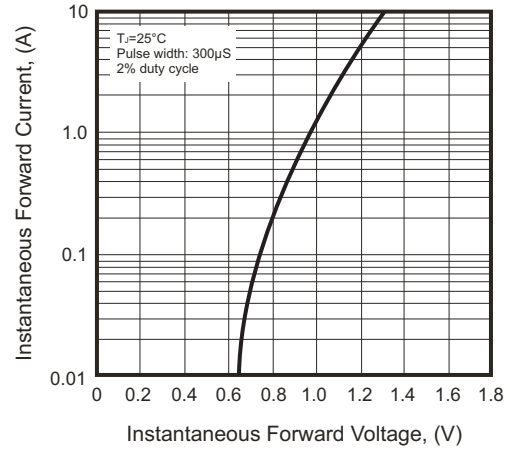
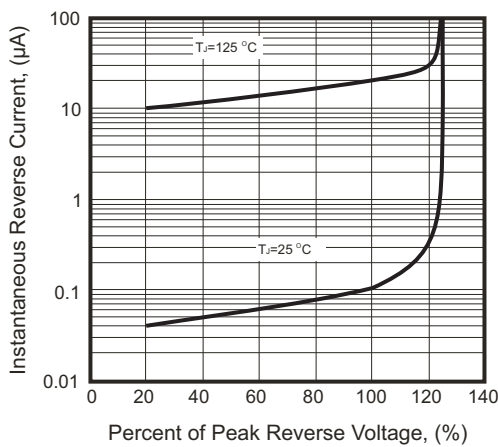
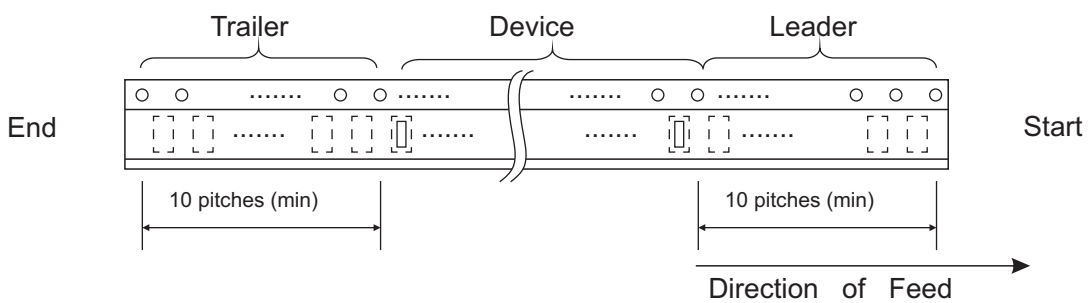
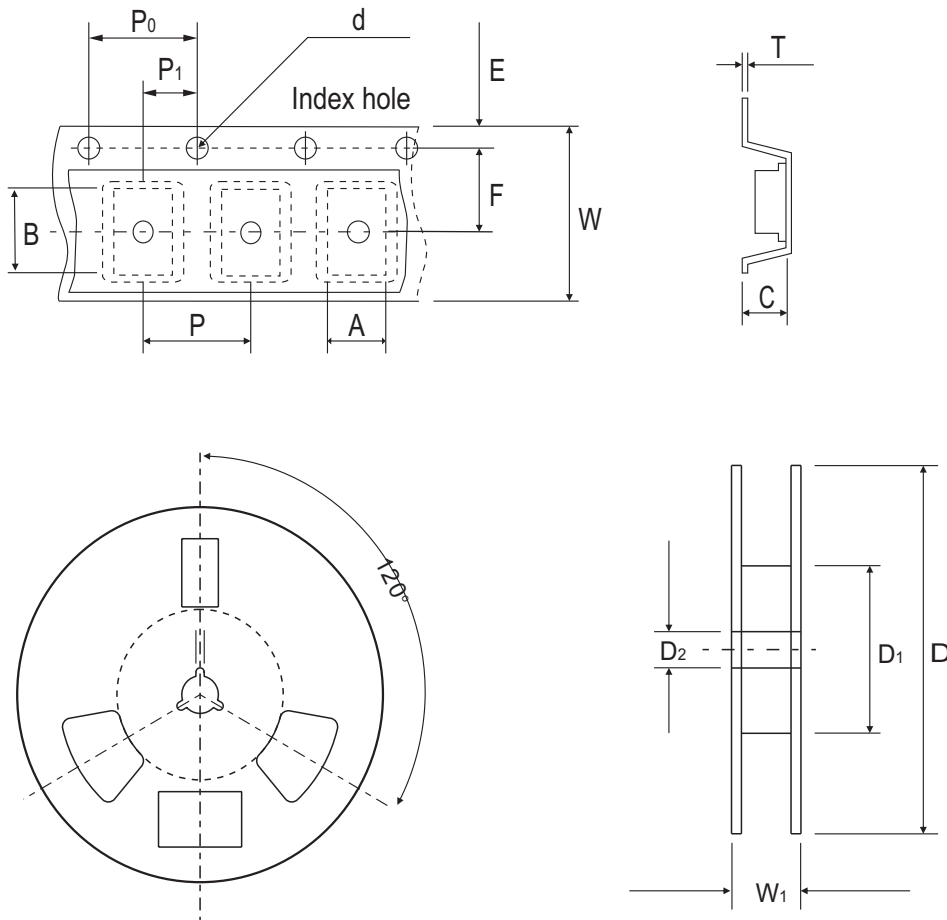


Fig.5 - Typical Reverse Characteristics



Reel Taping Specification



| DFS | SYMBOL | A | B | C | d | D | D ₁ | D ₂ |
|-----|--------|---------------|---------------|---------------|---------------|-----|----------------|----------------|
| | (mm) | 8.64 ± 0.10 | 10.41 ± 0.10 | 3.81 ± 0.10 | 1.55 ± 0.05 | 330 | 50.0 MIN. | 13.00 ± 0.20 |
| | (inch) | 0.340 ± 0.004 | 0.409 ± 0.004 | 0.150 ± 0.004 | 0.061 ± 0.002 | 13 | 1.969 MIN. | 0.512 ± 0.008 |

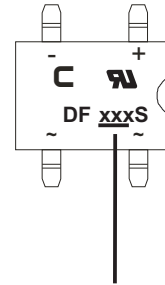
| DFS | SYMBOL | E | F | P | P ₀ | P ₁ | T | W | W ₁ |
|-----|--------|---------------|---------------|---------------|----------------|----------------|-------|---------------|----------------|
| | (mm) | 1.75 ± 0.10 | 7.50 ± 0.05 | 12.00 ± 0.10 | 4.00 ± 0.10 | 2.00 ± 0.10 | 0.32 | 16.00 ± 0.30 | 16.00~18.40 |
| | (inch) | 0.069 ± 0.004 | 0.295 ± 0.002 | 0.472 ± 0.004 | 0.157 ± 0.004 | 0.079 ± 0.004 | 0.013 | 0.630 ± 0.012 | 0.630~0.724 |

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REV: F

Marking Code

| Part Number | Marking code | Packaging |
|-------------|--------------|-----------|
| DF2005SP-G | DF2005S | Tube |
| DF201SP-G | DF201S | Tube |
| DF202SP-G | DF202S | Tube |
| DF204SP-G | DF204S | Tube |
| DF206SP-G | DF206S | Tube |
| DF208SP-G | DF208S | Tube |
| DF210SP-G | DF210S | Tube |
| DF2005ST-G | DF 2005S | Reel |
| DF201ST-G | DF201S | Reel |
| DF202ST-G | DF202S | Reel |
| DF204ST-G | DF204S | Reel |
| DF206ST-G | DF206S | Reel |
| DF208ST-G | DF208S | Reel |
| DF210ST-G | DF210S | Reel |



XXX / XXXX = Product type marking code
C = Comchip Logo

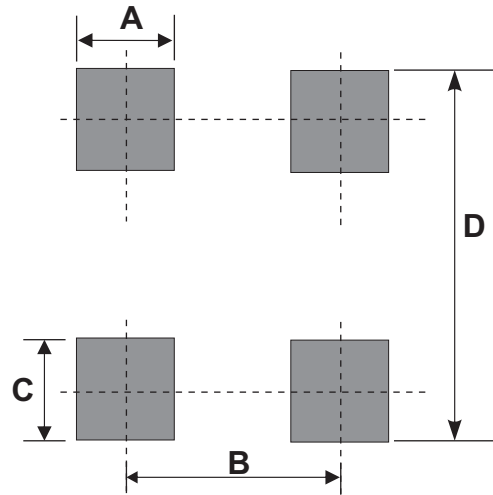
Note:

1) Suffix code after part number to specify packaging item .

| Packaging | Code |
|-----------|------|
| TUBE PACK | P |
| REEL PACK | T |

Suggested PAD Layout

| SIZE | DFS | |
|----------|-----------|-----------|
| | (mm) | (inch) |
| A | 1.20 Min | 0.047 Min |
| B | 5.21 REF | 0.205 REF |
| C | 1.52 Min | 0.060 Min |
| D | 10.26 Max | 0.404 Max |



Standard Packaging

| Case Type | TUBE PACK | |
|-----------|--------------|----------------|
| | TUBE (pcs) | Carton (pcs) |
| DFS | 50 | 10,000 |

| Case Type | REEL PACK | |
|-----------|--------------|------------------|
| | REEL (pcs) | Reel Size (inch) |
| DFS | 1,000 | 13 |

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REV: F



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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