

**ULTRA FAST
GLASS PASSIVATED RECTIFIERS**

REVERSE VOLTAGE - **50 to 1000** Volts
FORWARD CURRENT - **1.0** Ampere

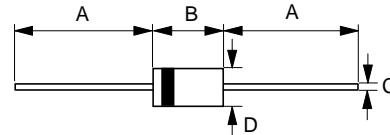
FEATURES

- Glass passivated chip
- Ultra fast switching for high efficiency
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon, Alcohol, Chlorothene and similar solvents
- Plastic material has UL flammability classification 94V-0

MECHANICAL DATA

- Case : JEDEC DO-41 molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.012 ounces, 0.34 grams
- Mounting position : Any

DO-41



| DO-41 | | |
|------------------------------|--------------------|--------------------|
| Dim. | Min. | Max. |
| A | 25.4 | - |
| B | 4.10 | 5.20 |
| C | 0.71 \varnothing | 0.86 \varnothing |
| D | 2.00 \varnothing | 2.70 \varnothing |
| All Dimensions in millimeter | | |

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| CHARACTERISTICS | SYMBOL | UG1001 | UG1002 | UG1003 | UG1004 | UG1005 | UG1006 | UG1007 | 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 =55°C | I(AV) | 1.0 | | | | | | | A |
| Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC Method) | I _{FSM} | 30 | | | | | | | A |
| Maximum forward Voltage at 1.0A DC | V _F | 1.0 | | 1.3 | | 1.7 | | | V |
| Maximum DC Reverse Current @T _J =25°C at Rated DC Blocking Voltage @T _J =100°C | I _R | 5 100 | | | | | | | uA |
| Maximum Reverse Recovery Time (Note 1) | T _{RR} | 50 | | | | 75 | | | ns |
| Typical Junction Capacitance (Note 2) | C _J | 20 | | | | 10 | | | pF |
| Typical Thermal Resistance (Note 3) | R _{θJA} | 40 | | | | | | | °C/W |
| Storage / Operating Temperature Range | T _{STG} , T _J | -55 to +150 | | | | | | | °C |

NOTES : 1. Test condition of T_{RR}: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal Resistance Junction to Ambient.

REV. 2, 01-Dec-2000, KDFC01

