# HIGH VOLTAGE RECTIFIERS

**VOLTAGE RANGE: 1200 --- 2000 V**
**CURRENT: 0.2,0.5 A**

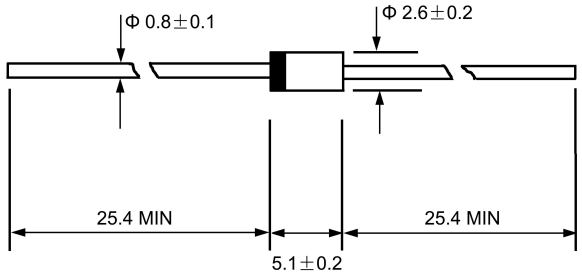
## FEATURES

- ◇ Low cost
- ◇ Diffused junction
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with alcohol,Isopropanol and similar solvents
- ◇ The plastic material carries U/L recognition 94V-0

## MECHANICAL DATA

- ◇ Case:JEDEC DO--41,molded plastic
- ◇ Terminals: Axial lead ,solderable per MIL- STD-202,Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.012ounces,0.34 grams
- ◇ Mounting position: Any

**DO - 41**




Dimensions in millimeters

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| | | R1200 | R1500 | R1800 | R2000 | UNITS |
|---|---|---|---|---|---|---|
| Maximum recurrent peak reverse voltage | $V_{RRM}$ | 1200 | 1500 | 1800 | 2000 | V |
| Maximum RMS voltage | $V_{RMS}$ | 840 | 1050 | 1260 | 1400 | V |
| Maximum DC blocking voltage | $V_{DC}$ | 1200 | 1500 | 1800 | 2000 | V |
| Maximum average forw ard rectified current 9.5mm lead length, @$T_A$=75℃ | $I_{F(AV)}$ | 0.5 | | | 0.2 | A |
| Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load @$T_J$=125℃ | $I_{FSM}$ | 30.0 | | | | A |
| Maximum instantaneous forw ard voltage @ $I_F$=$I_{F(AV)}$ | $V_F$ | 2.0 | | | 3.0 | V |
| Maximum reverse current @$T_A$=25℃ at rated DC blocking voltage @$T_A$=100℃ | $I_R$ | 5.0<br>50.0 | | | | μA |
| Typical thermal resistance (Note1) | $R_{\theta JA}$ | 35 | | | | ℃/W |
| Typical junction capacitance (Note2) | $C_J$ | 15 | | | | pF |
| Operating junction temperature range | $T_J$ | - 55 ---- + 125 | | | | ℃ |
| Storage temperature range | $T_{STG}$ | - 55 ---- + 150 | | | | ℃ |

NOTE: 1. Thermal resistance from junction to ambient.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

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**FIG.1 – FORWARD DERATING CURVE**

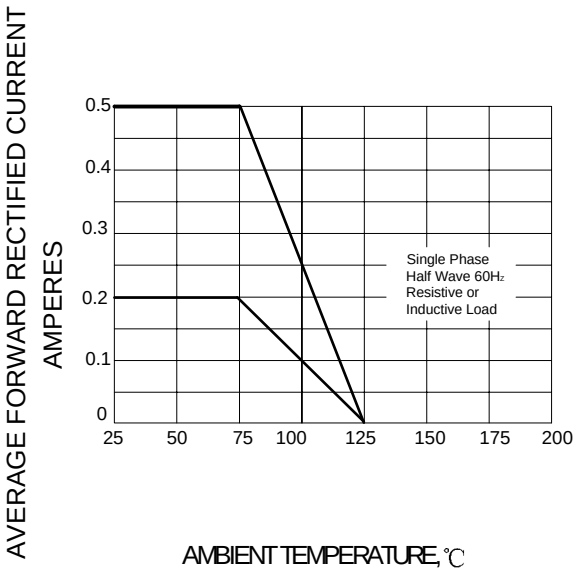


**FIG.2 – TYPICAL FORWARD CHARACTERISTICS**

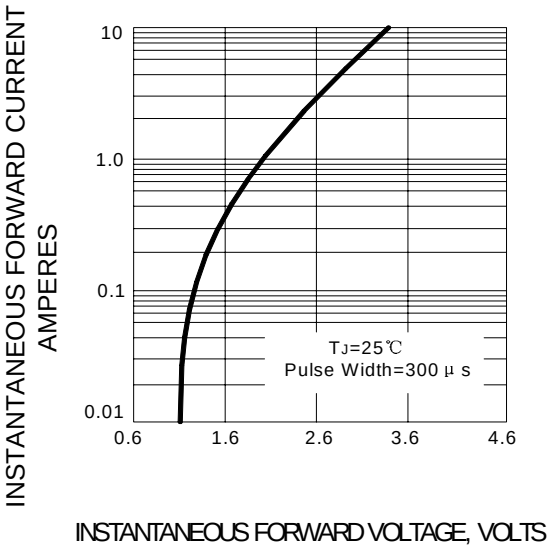


**FIG.3 – PEAK FORWARD SURGE CURRENT**

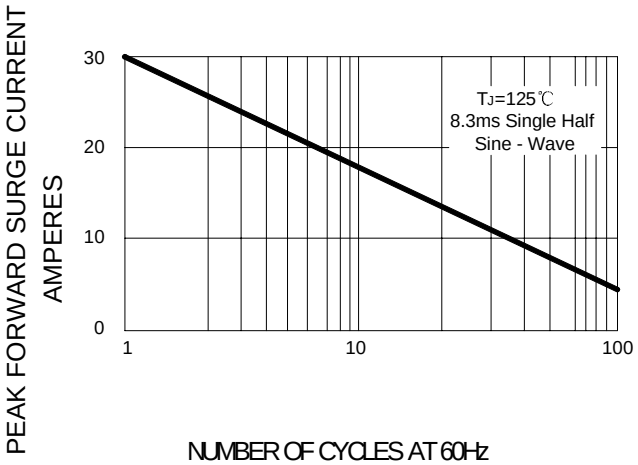


**FIG.4 – TYPICAL JUNCTION CAPACITANCE**