

BY8004

PRV : 5000 Volts

I_{F(AV)} : 20 mA

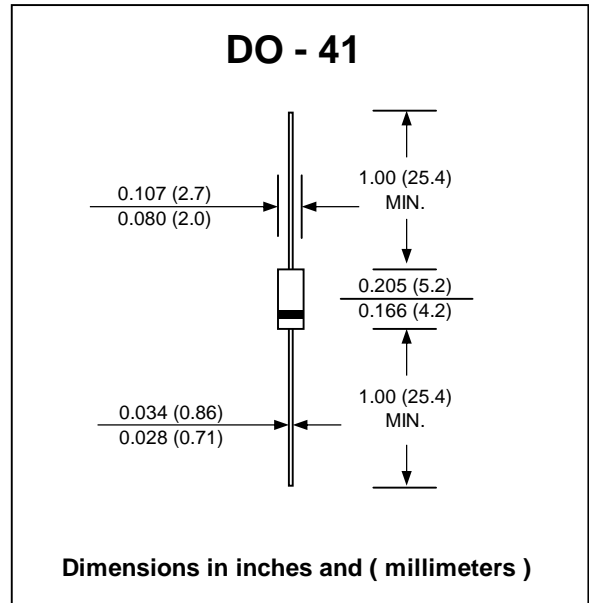
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : DO-41 Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.34 gram

FAST RECOVERY HIGH VOLTAGE RECTIFIER DIODE



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| RATING | SYMBOL | VALUE | UNIT |
|--|--------------------|---------------|------|
| Maximum Repetitive Peak Reverse Voltage | V _{RRM} | 5000 | V |
| Maximum Working Reverse Voltage | V _{RW} | 4000 | V |
| Maximum Average Forward Current (See Fig. 2) | I _{F(AV)} | 20 | mA |
| Maximum Repetitive Peak Forward Current (Note 1) | I _{FRM} | 500 | mA |
| Maximum Forward Voltage at I _F = 100 mA. | V _F | 20 | V |
| Maximum Reverse Current at V _R = V _{RWmax} , T _j = 120 °C | I _R | 3.0 | µA |
| Maximum Reverse Recovery Time (Note 2) | T _{rr} | 100 | ns |
| Junction Temperature Range | T _J | - 40 to + 150 | °C |
| Storage Temperature Range | T _{STG} | - 40 to + 150 | °C |

Notes :

- (1) Withstands peak currents during flash-over in a picture tube.
- (2) Reverse Recovery Test Conditions : I_F = 0.5 A, I_R = 1.0 A, I_{rr} = 0.25 A.

RATING AND CHARACTERISTIC CURVES (BY8004)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

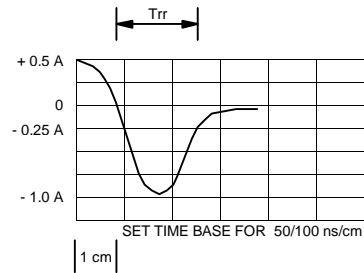
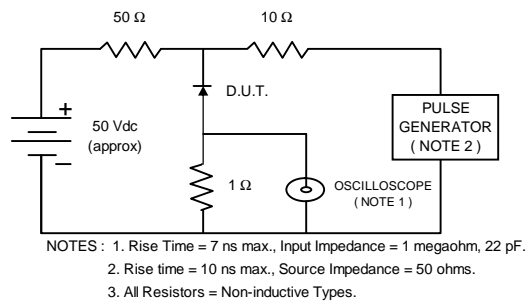


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

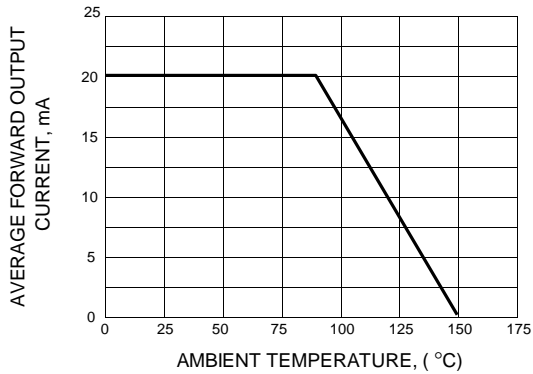


FIG.3 - MAXIMUM PEAK FORWARD CURRENT

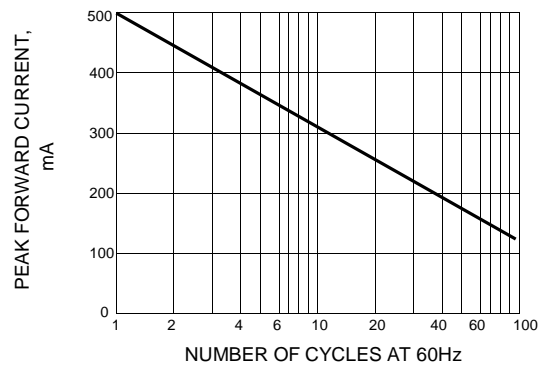


FIG.4 - MAXIMUM FORWARD CHARACTERISTICS

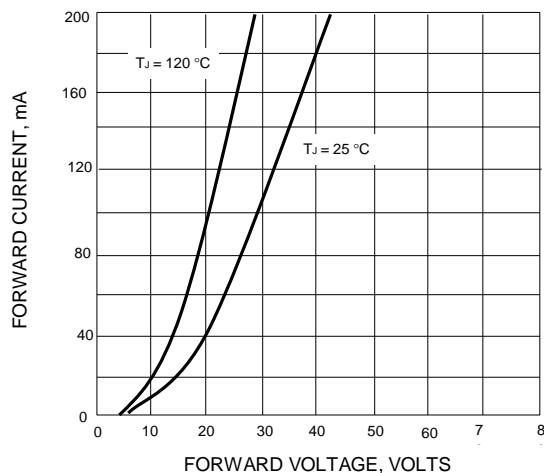


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

