

AK03 - AK04

PRV : 30 - 40 Volts
I_o : 1.0 Amperes

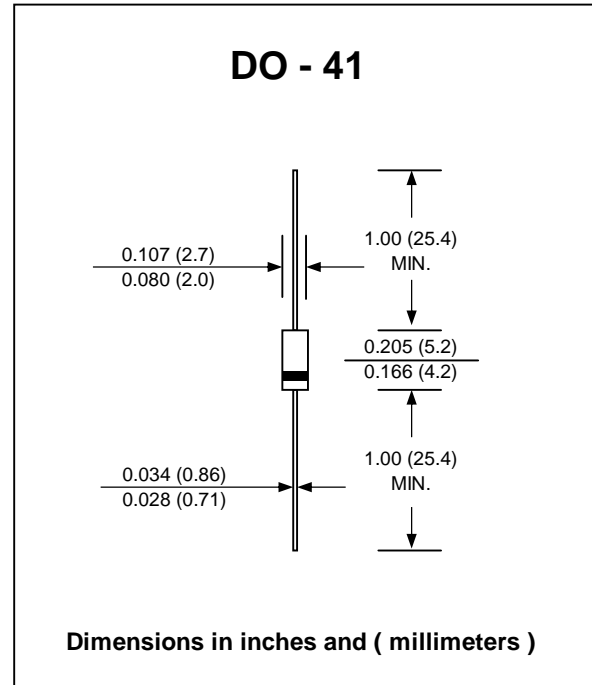
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * High efficiency
- * Low power loss
- * Low forward voltage drop
- * Low cost
- * **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 : 0.339 gram

SCHOTTKY BARRIER 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 | AK03 | AK04 | UNIT |
|---|---------------------|---------------|------|------|
| Maximum Recurrent Peak Reverse Voltage | V _R RRM | 30 | 40 | V |
| Maximum Peak Reverse Surge Voltage | V _R RSM | 35 | 45 | V |
| Maximum Average Forward Current | I _F (AV) | 1.0 | | A |
| Maximum Peak Forward Surge Current (50 Hz, Half-cycle, Sine wave, Single Shot) | I _F SM | 25 | | A |
| Maximum Forward Voltage at I _F = 1A | V _F | 0.55 | | V |
| Maximum Reverse Current at V _R = V _R RRM T _a = 25 °C | I _R | 1.0 | | mA |
| Maximum Reverse Current at V _R = V _R RRM T _j = 100 °C | I _R (H) | 50 | | mA |
| Junction Temperature Range | T _J | - 40 to + 125 | | °C |
| Storage Temperature Range | T _{STG} | - 40 to + 125 | | °C |

RATING AND CHARACTERISTIC CURVES (AK03 - AK04)

FIG.1 - FORWARD CURRENT DERATING CURVE

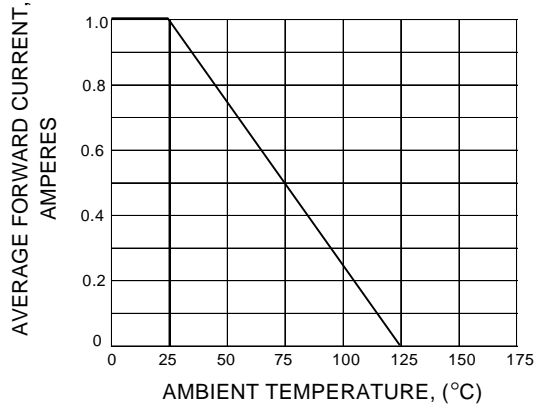


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

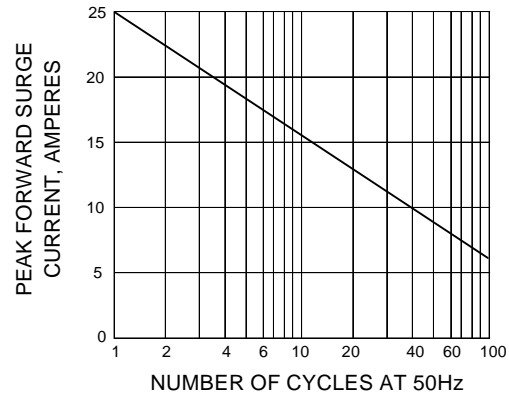


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

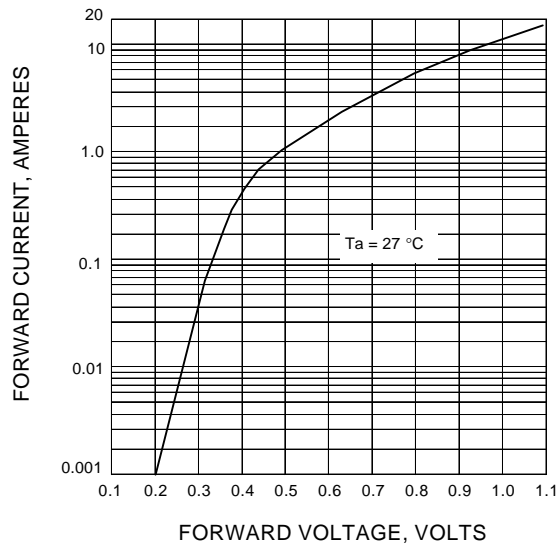


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

