

## AK03 - AK04

**PRV : 30 - 40 Volts**  
**I<sub>o</sub> : 1.0 Amperes**

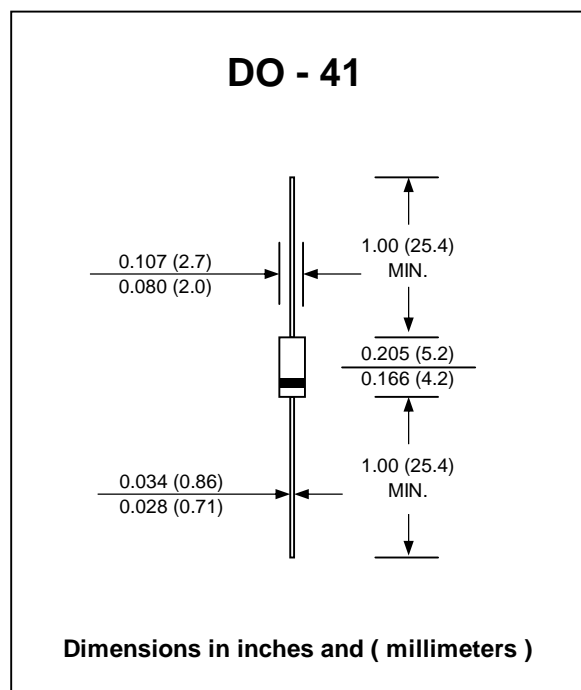
### FEATURES :

- \* 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



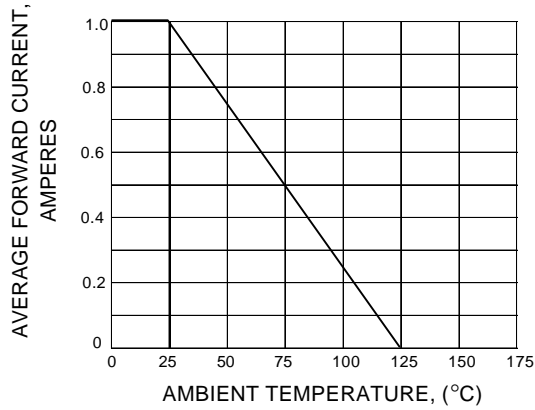
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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%.

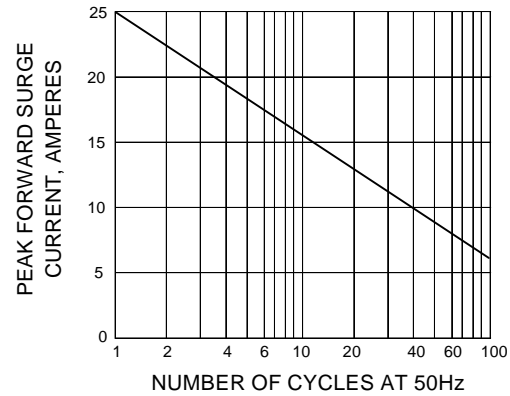
RATING	SYMBOL	AK03	AK04	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>R</sub> RRM	30	40	V
Maximum Peak Reverse Surge Voltage	V <sub>R</sub> RSM	35	45	V
Maximum Average Forward Current	I <sub>F</sub> (AV)	1.0		A
Maximum Peak Forward Surge Current ( 50 Hz, Half-cycle, Sine wave, Single Shot )	I <sub>F</sub> SM	25		A
Maximum Forward Voltage at I <sub>F</sub> = 1A	V <sub>F</sub>	0.55		V
Maximum Reverse Current at V <sub>R</sub> = V <sub>R</sub> RRM    T <sub>a</sub> = 25 °C	I <sub>R</sub>	1.0		mA
Maximum Reverse Current at V <sub>R</sub> = V <sub>R</sub> RRM    T <sub>j</sub> = 100 °C	I <sub>R</sub> (H)	50		mA
Junction Temperature Range	T <sub>J</sub>	- 40 to + 125		°C
Storage Temperature Range	T <sub>STG</sub>	- 40 to + 125		°C

## RATING AND CHARACTERISTIC CURVES ( AK03 - AK04 )

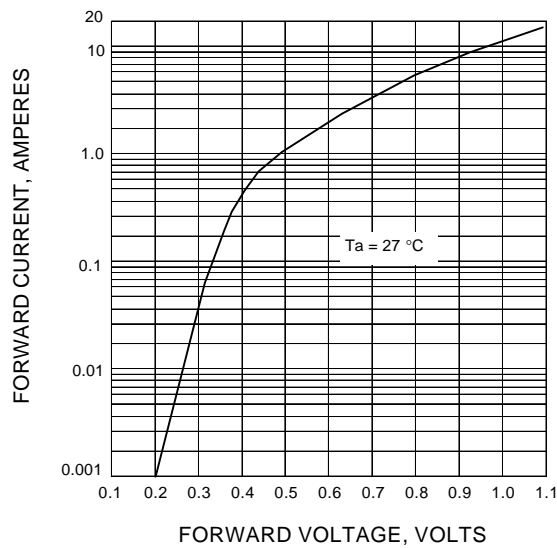
**FIG.1 - FORWARD CURRENT DERATING CURVE**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

