

# 31DQ03 - 31DQ04

# SCHOTTKY BARRIER RECTIFIER DIODES

**PRV : 30 - 40 Volts**

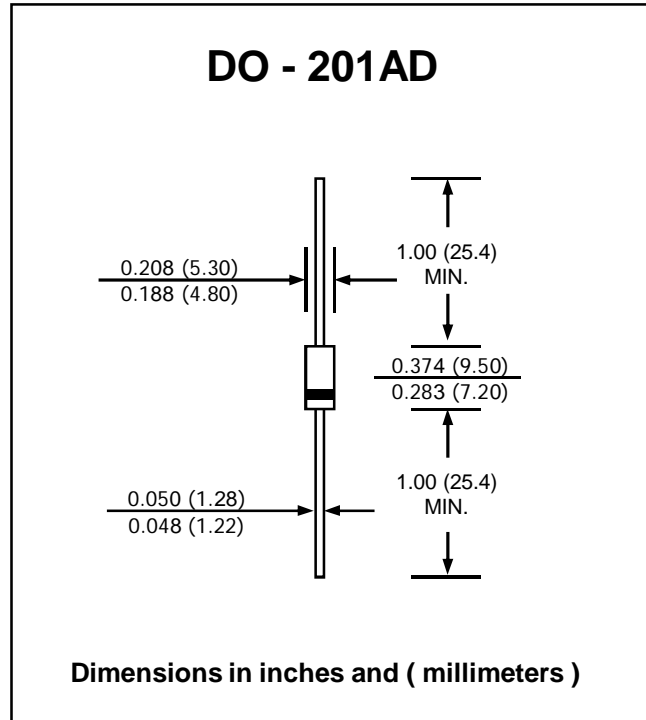
**I<sub>o</sub> : 3.3 Amperes**

**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-201AD Molded plastic
- \* Epoxy : UL94V-0 rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 1.1 grams



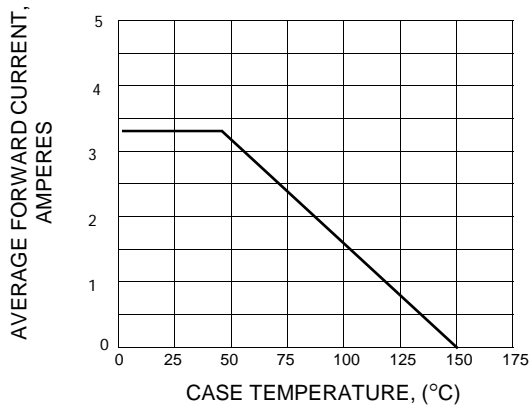
**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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%.

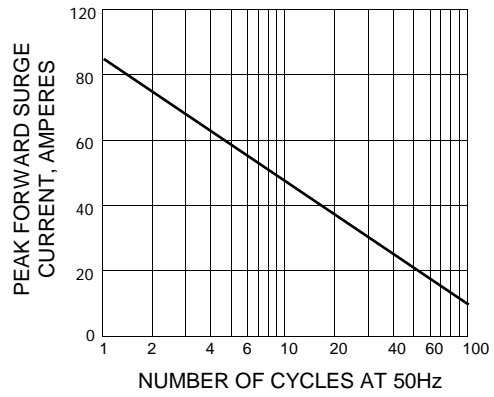
RATING	SYMBOL	31DQ03	31DQ04	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	30	40	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	30	40	V
Maximum Average Forward Current at Ambient Temperature , T <sub>c</sub> = 48 °C	I <sub>F(AV)</sub>	3.3		A
Maximum Non-repetitive Peak Forward Surge Current ( 50 Hz, Sine wave, 10ms )	I <sub>FSM</sub>	90		A
Maximum Forward Voltage at I <sub>F</sub> = 3.0 A	V <sub>F</sub>	0.57		V
Maximum Reverse Current at V <sub>R</sub> = V <sub>RRM</sub> , T <sub>j</sub> = 25°C	I <sub>R</sub>	1.0		mA
Junction Temperature Range	T <sub>J</sub>	- 40 to + 150		°C
Storage Temperature Range	T <sub>STG</sub>	- 40 to + 150		°C

**RATING AND CHARACTERISTIC CURVES ( 31DQ03- 31DQ04 )**

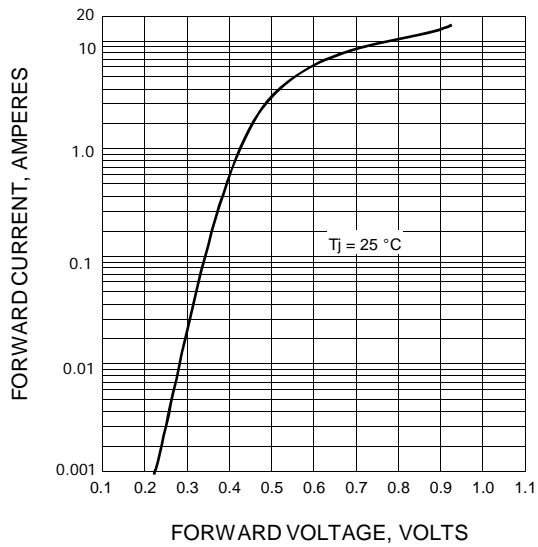
**FIG.1 - FORWARD CURRENT DERATING CURVE**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

