

## 31DQ09 - 31DQ10

**PRV : 90 - 100 Volts**  
**Io : 3.3 Amperes**

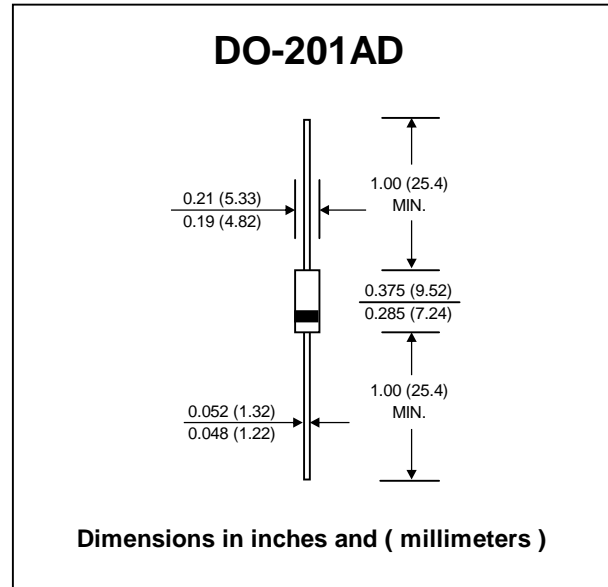
### FEATURES :

- \* 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-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 : 1.1 grams

## SCHOTTKY BARRIER RECTIFIER DIODES



### 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	31DQ09	31DQ10	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	90	100	V
Maximum DC Blocking Voltage	$V_{DC}$	90	100	V
Maximum Average Forward Current at Ambient Temperature , $T_c = 53\text{ }^\circ\text{C}$	$I_{F(AV)}$	3.3		A
Maximum Non-repetitive Peak Forward Surge Current ( 50 Hz, Sine wave, 10ms )	$I_{FSM}$	34		A
Maximum Forward Voltage at $I_F = 3.0\text{ A}$	$V_F$	0.85		V
Maximum Reverse Current at $V_R = V_{RRM}$ , $T_j = 25\text{ }^\circ\text{C}$	$I_R$	1.0		mA
Maximum Reverse Current at $V_R = V_{RRM}$ , $T_j = 125\text{ }^\circ\text{C}$	$I_{RM}$	3.0		mA
Junction Temperature Range	$T_J$	- 40 to + 150		$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 40 to + 150		$^\circ\text{C}$

RATING AND CHARACTERISTIC CURVES ( 31DQ09 - 31DQ10 )

FIG.1 - FORWARD CURRENT DERATING CURVE

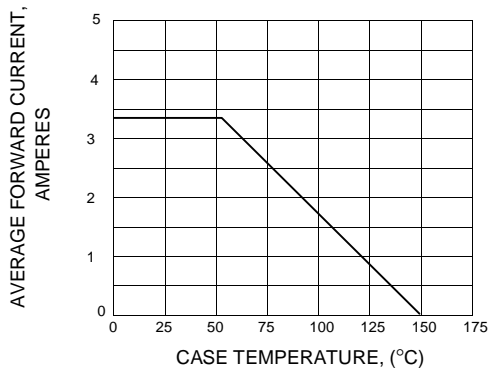


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

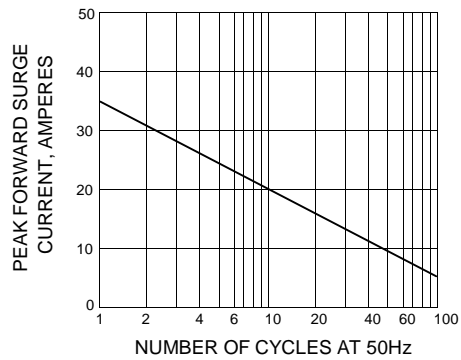


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

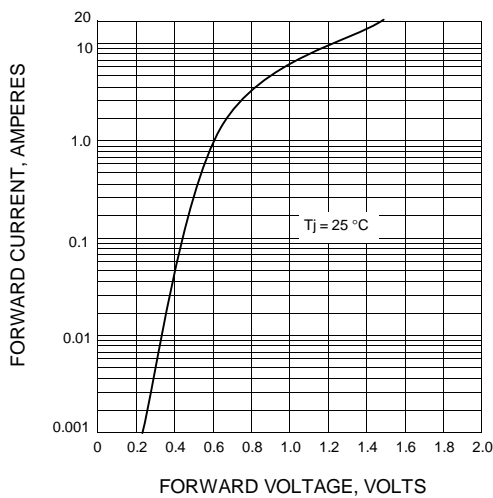


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

