Certificate Number: Q10561

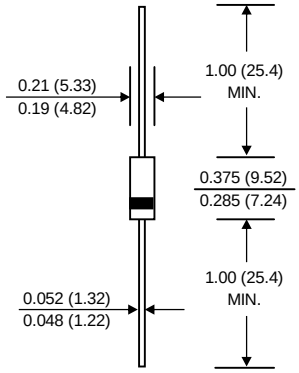
Certificate Number: E17276

# 31DQ09 - 31DQ10

# SCHOTTKY BARRIER RECTIFIER DIODES

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

### DO-201AD




**Dimensions in inches and ( millimeters )**

### 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

### 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 , Tc = 53 °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 A | $V_F$ | 0.85 | | V |
| Maximum Reverse Current at $V_R = V_{RRM}$ , Tj = 25°C | $I_R$ | 1.0 | | mA |
| Maximum Reverse Current at $V_R = V_{RRM}$ , Tj = 125°C | $I_{RM}$ | 3.0 | | mA |
| Junction Temperature Range | $T_J$ | - 40 to + 150 | | °C |
| Storage Temperature Range | $T_{STG}$ | - 40 to + 150 | | °C |

## RATING AND CHARACTERISTIC CURVES ( 31DQ09 - 31DQ10 )

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

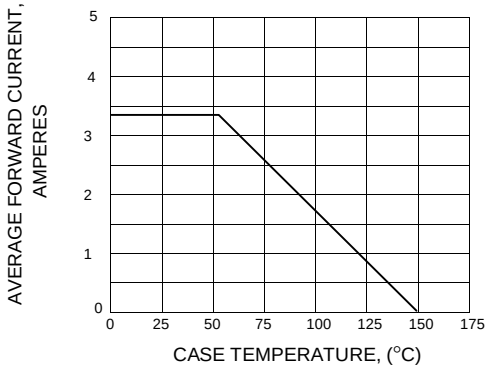



**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**

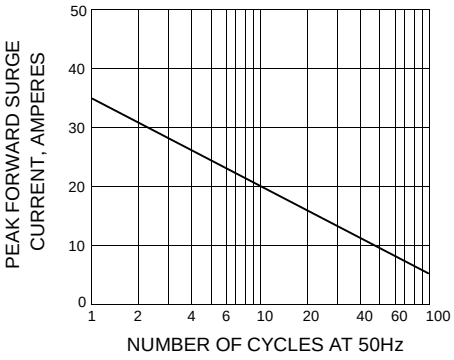



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**

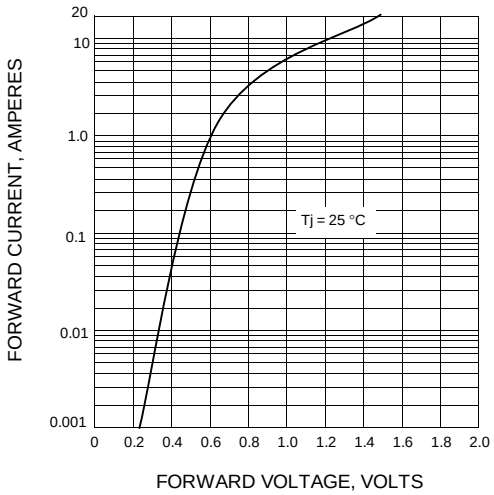



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**