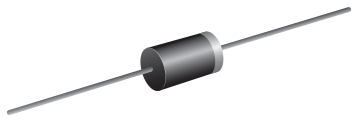
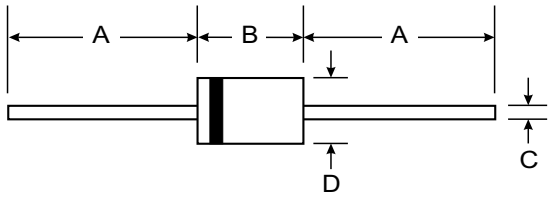
31DQ09 - 31DQ10

SCHOTTKY BARRIER RECTIFIER DIODES

VOLTAGE RANGE: 90 - 100V
CURRENT: 3.3 A





Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability

Mechanical Data

- Case: DO-201AD, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

RoHS COMPLIANT

DO-201AD		
Dim	**Min**	**Max**
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	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

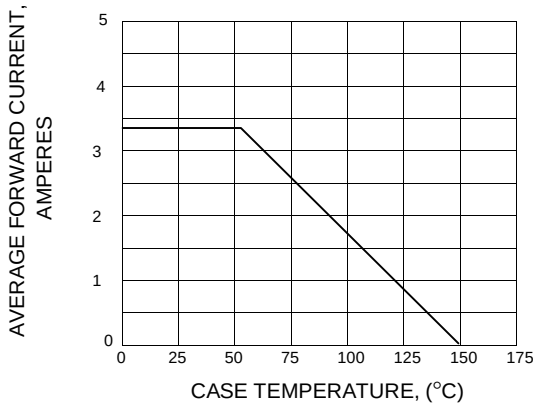


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

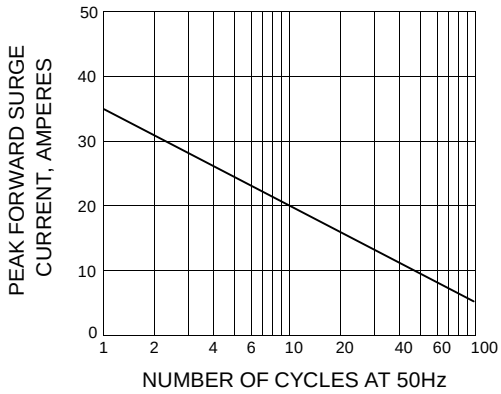


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

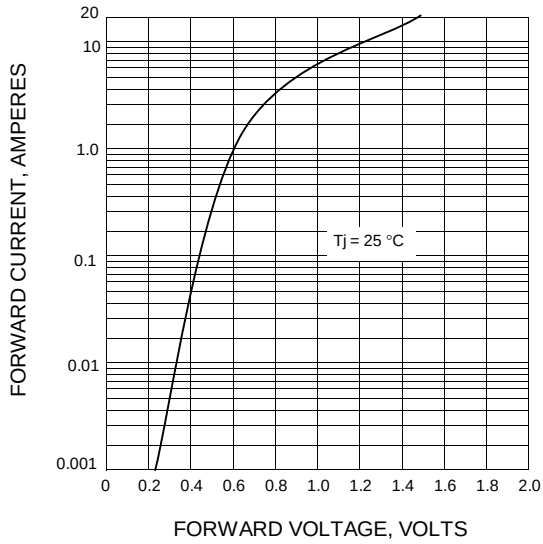


FIG.4 - TYPICAL REVERSE CHARACTERISTICS