SYNSEMI SEMICONDUCTOR

31DQ03 - 31DQ04

SCHOTTKY BARRIER RECTIFIER DIODES

PRV : 30 - 40 Volts
Io : 3.3 Amperes

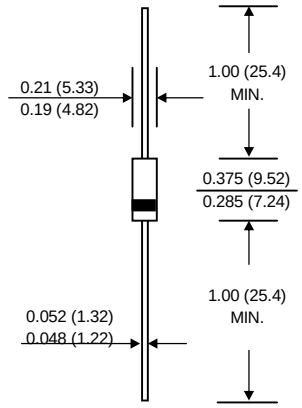
FEATURES :

* 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

DO-201AD



Dimensions in inches and (millimeters)

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_{RRM}	30	40	V
Maximum DC Blocking Voltage	V_{DC}	30	40	V
Maximum Average Forward Current at Ambient Temperature , Tc = 48 °C	$I_{F(AV)}$	3.3		A
Maximum Non-repetitive Peak Forward Surge Current (50 Hz, Sine wave, 10ms)	I_{FSM}	120		A
Maximum Forward Voltage at I_F = 3.0 A	V_F	0.55		V
Maximum Reverse Current at $V_R = V_{RRM}$, Tj = 25°C	I_R	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 (31DQ03- 31DQ04)

FIG.1 - FORWARD CURRENT DERATING CURVE

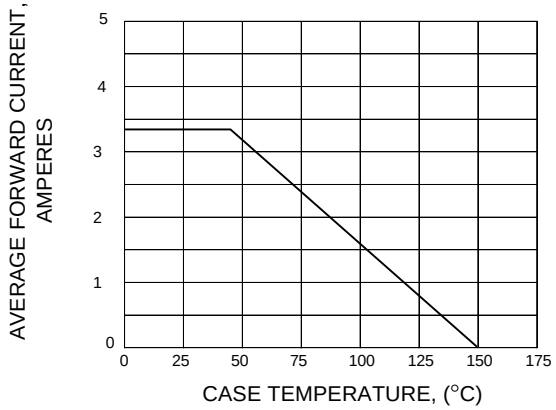


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

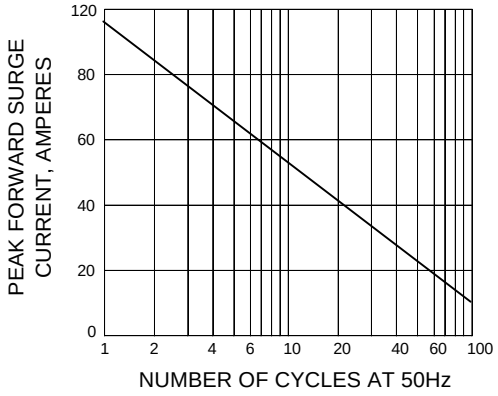


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

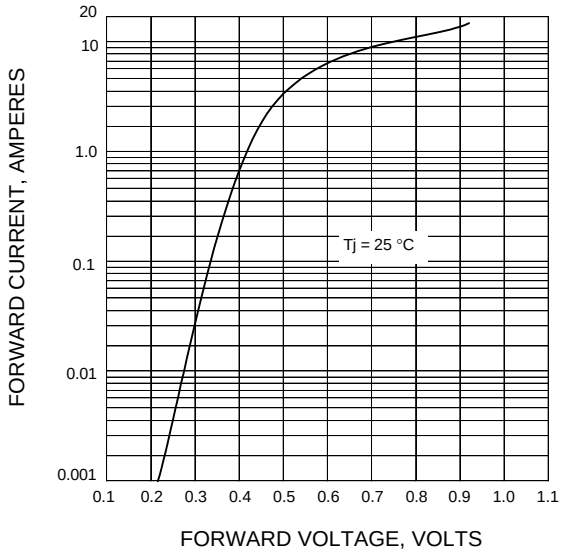


FIG.4 - TYPICAL REVERSE CHARACTERISTICS