

31DQ05 - 31DQ06

SCHOTTKY BARRIER RECTIFIER DIODES

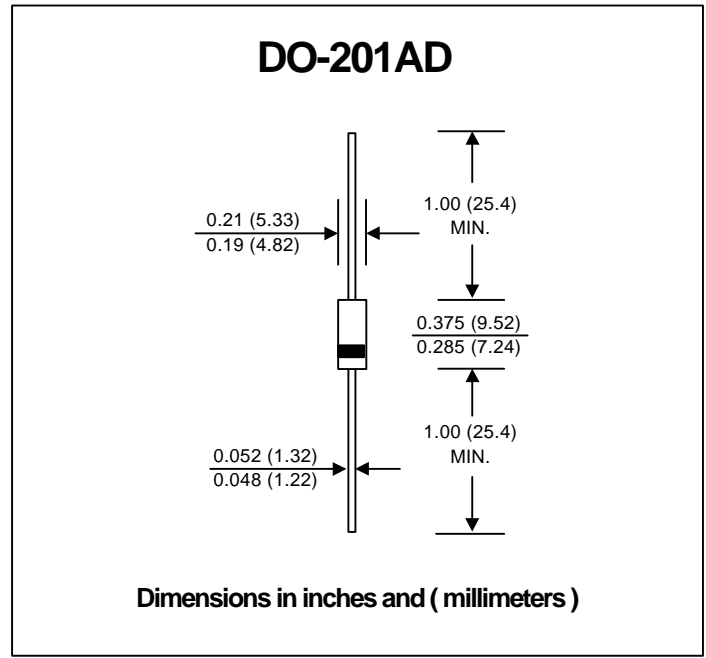
PRV : 50 - 60 Volts
I_o : 3.3 Amperes

FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * High efficiency
- * Low power loss
- * Low forward voltage drop
- * Low cost

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	31DQ05	31DQ06	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	60	V
Maximum DC Blocking Voltage	V _{DC}	50	60	V
Maximum Average Forward Current at Ambient Temperature , T _c = 40 °C	I _{F(AV)}	3.3		A
Maximum Non-repetitive Peak Forward Surge Current (50 Hz, Sine wave, 10ms)	I _{FSM}	55		A
Maximum Forward Voltage at I _F = 3.0 A	V _F	0.62		V
Maximum Reverse Current at V _R = V _{RRM} , T _j = 25°C	I _R	2.0		mA
Maximum Reverse Current at V _R = V _{RRM} , T _j = 125°C	I _{RM}	15		mA
Junction Temperature Range	T _J	- 40 to + 150		°C
Storage Temperature Range	T _{STG}	- 40 to + 150		°C

RATING AND CHARACTERISTIC CURVES (31DQ05 - 31DQ06)

FIG.1 - FORWARD CURRENT DERATING CURVE

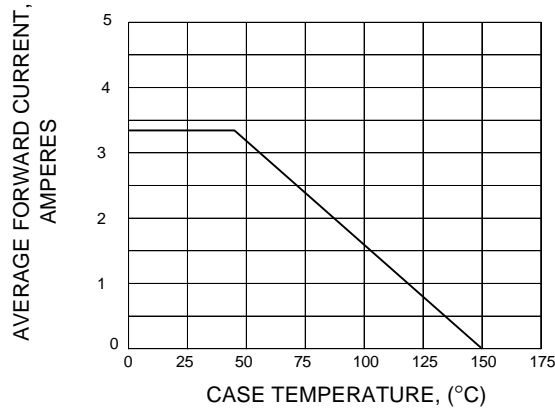


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

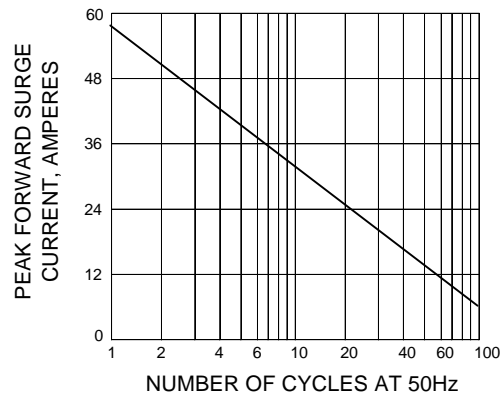


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

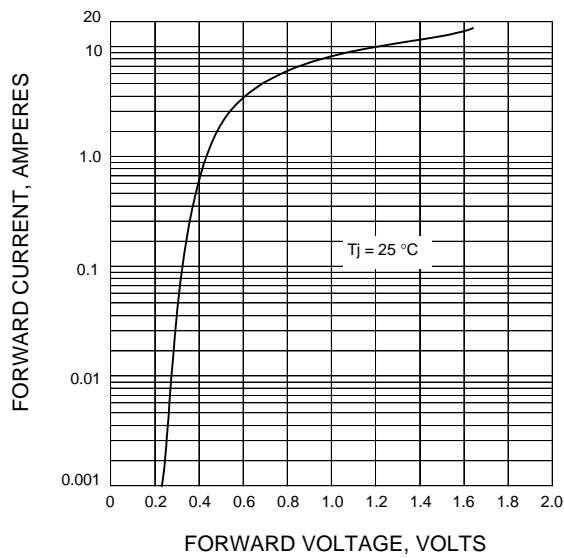


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

