

3GU41

ULTRA FAST RECOVERY DIODE

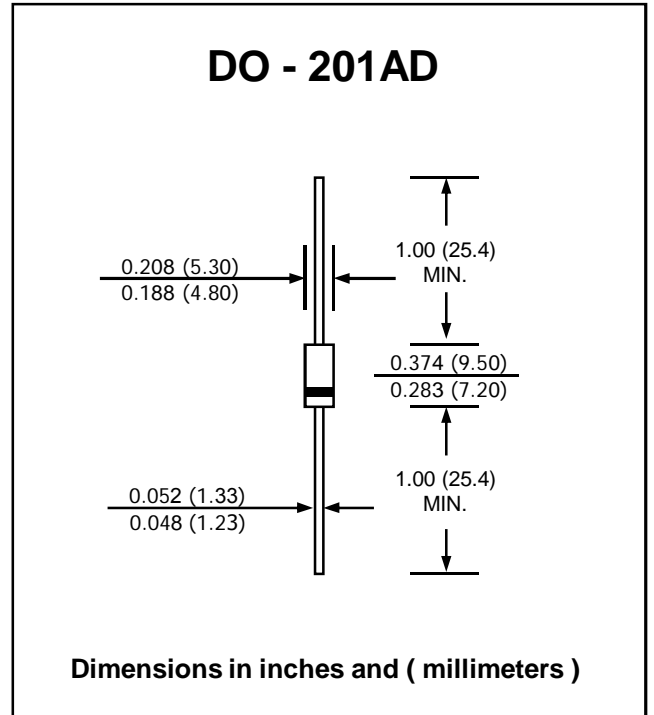
PRV : 400 Volts
Io : 3.0 Amperes

FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Fast switching for high efficiency
- * **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 : 1.21 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	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	400	V
Maximum Average Forward Current	I _{F(AV)}	3.0	A
Maximum Peak One Cycle Surge Forward Current (Non-Repetitive)	I _{FSM}	80 (50Hz)	A
Maximum Peak Forward Voltage at I _F = 3.0 A	V _F	1.5	V
Maximum Repetitive Peak Reverse Current at V _{RRM}	I _R	300	µA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	100	ns
Junction Temperature Range	T _J	- 40 to + 150	°C
Storage Temperature Range	T _{STG}	- 40 to + 150	°C

Note:

(1) Reverse Recovery Test Conditions : I_F = 1 A, di/dt = -30 A/µs.

RATING AND CHARACTERISTIC CURVES (3GU41)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

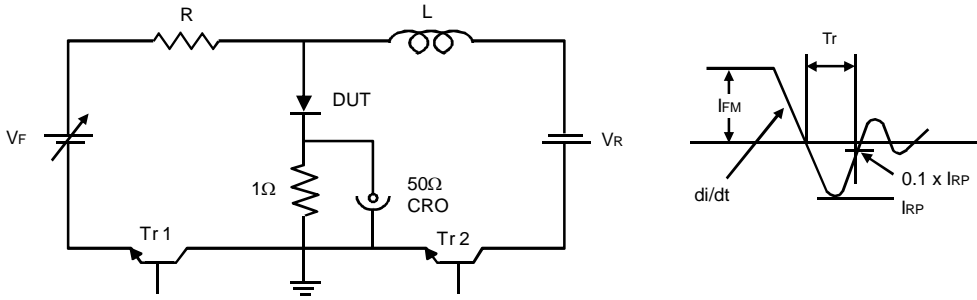


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

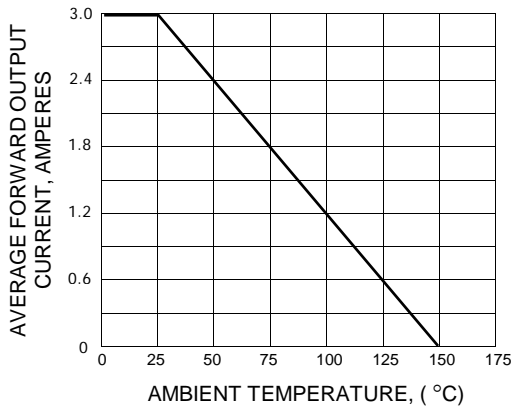


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

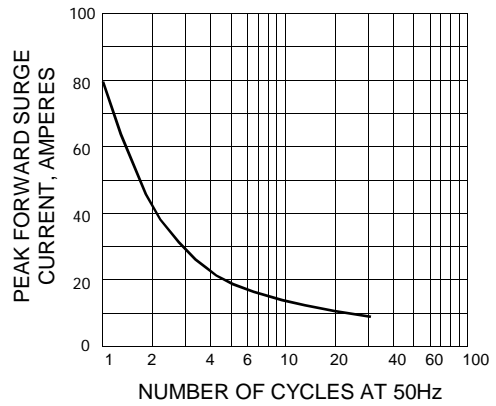


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

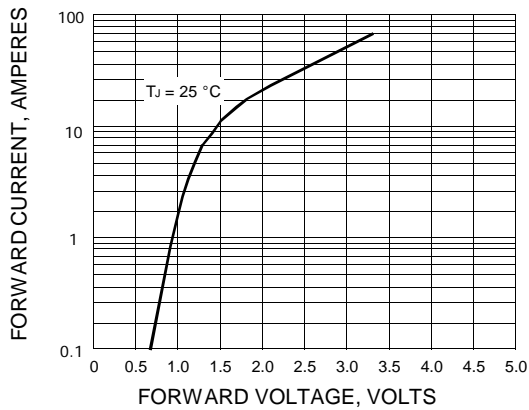


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

