

30DF6

FAST RECOVERY DIODE

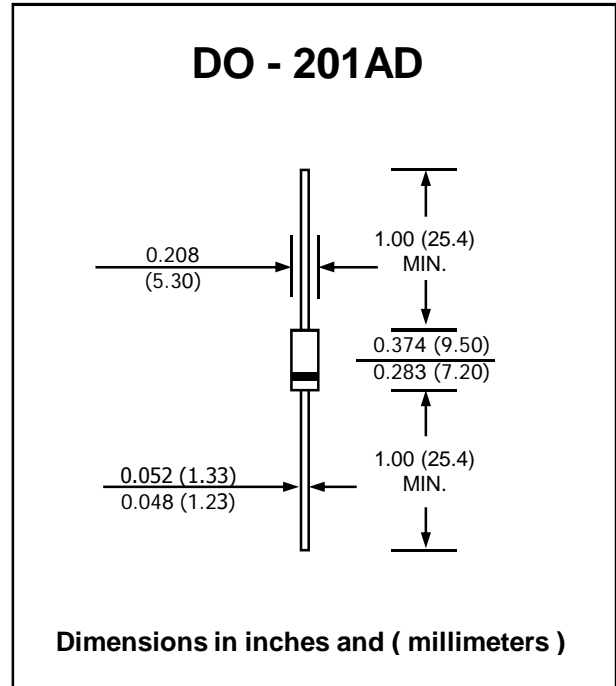
PRV : 600 Volts
Io : 3 Amperes

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 : 1.16 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 Recurrent Peak Reverse Voltage	VRRM	600	V
Maximum RMS Voltage	VRMS	420	V
Maximum DC Blocking Voltage	VDC	600	V
Maximum Average Forward Current Ta = 40°C	IF(AV)	3.0	A
Maximum Peak Forward Surge Current, 8.3ms Single half sine wave	IFSM	90	A
Maximum Peak Forward Voltage at IF = 3 Amps.	VF	1.25	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	IRM	10	µA
Maximum Reverse Recovery Time (Note 1)	Trr	200	ns
Junction Temperature Range	TJ	- 65 to + 150	°C
Storage Temperature Range	TSTG	- 65 to + 150	°C

Note :

(1) Reverse Recovery Test Conditions : IF = 0.5 A, IR = 1.0 A, Irr = 0.25 A.

RATING AND CHARACTERISTIC CURVES (30DF6)

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

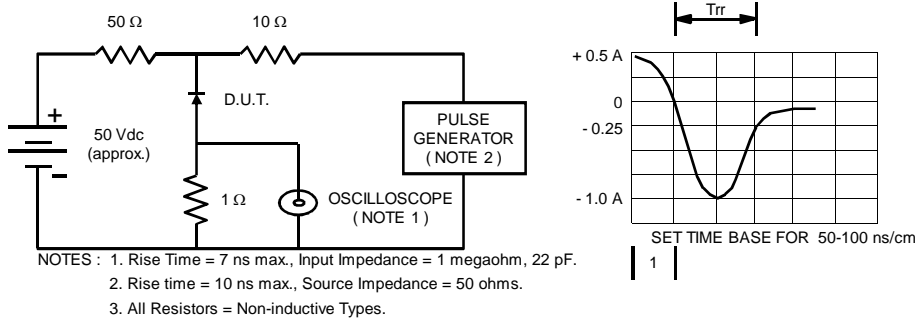


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

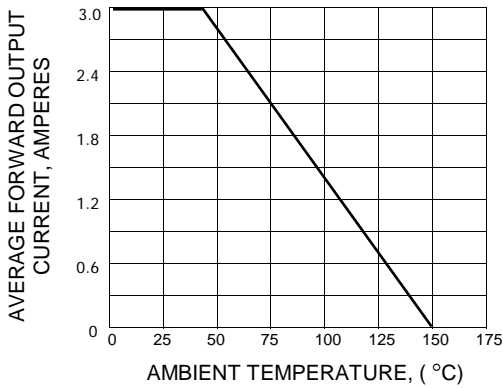


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

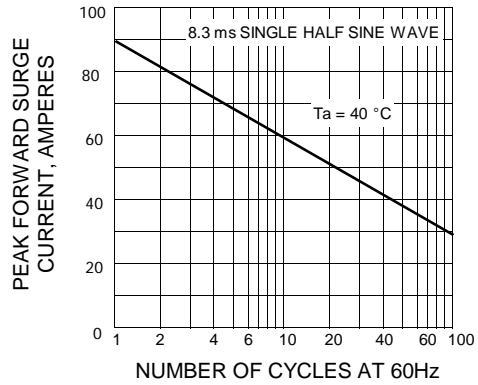


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

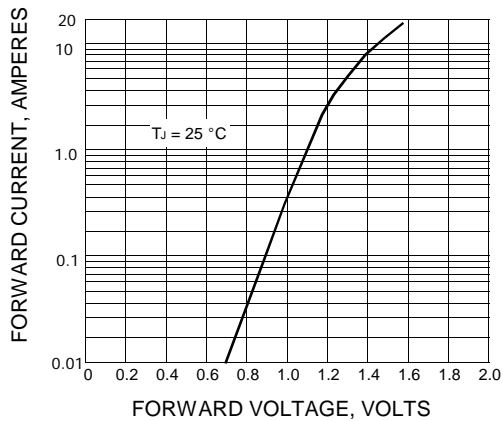


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

