



S3L60

PRV : 600 Volts
Io : 2.2 Amperes

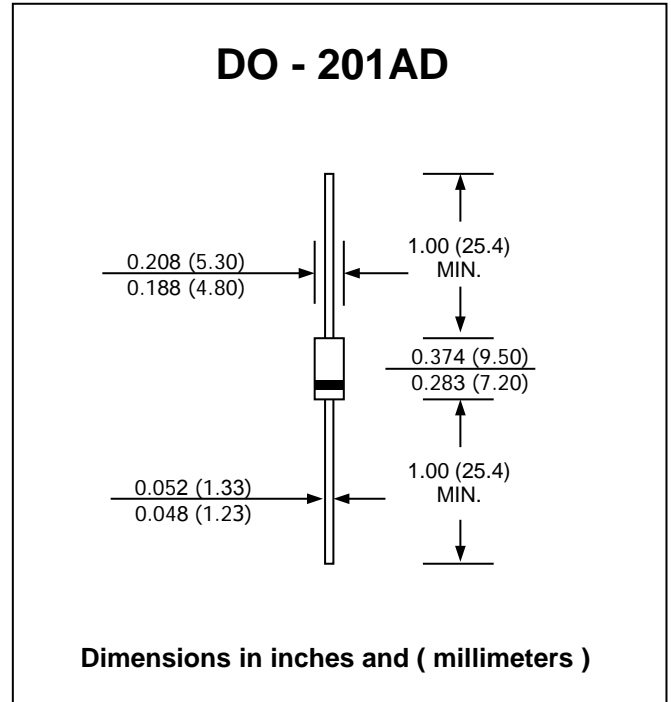
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Super fast recovery time
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : DO-201AD Molded plastic
- * Epoxy : UL94V-0 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

SUPER FAST RECOVERY RECTIFIER DIODES



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}	600	V
Maximum Average Forward Current	T _L = 132 °C	I _{F(AV)}	2.2	A
	T _a = 25 °C		1.8	A
Maximum Peak One Cycle Surge Forward Current (50 Hz, Sine wave, Non-Repetitive)		I _{FSM}	60	A
Maximum Peak Forward Voltage at I _F = 2.2 A		V _F	1.5	V
Maximum Repetitive Peak Reverse Current at V _{RRM}		I _R	10	μA
Maximum Reverse Recovery Time (Note 1)		T _{rr}	50	ns
Thermal Resistance, Junction to Ambient		R _{θJA}	60	°C/W
Thermal Resistance, Junction to Lead		R _{θJL}	6.5	°C/W
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 = 0.5 A, I_R = 1.0 A

RATING AND CHARACTERISTIC CURVES (S3L60)

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

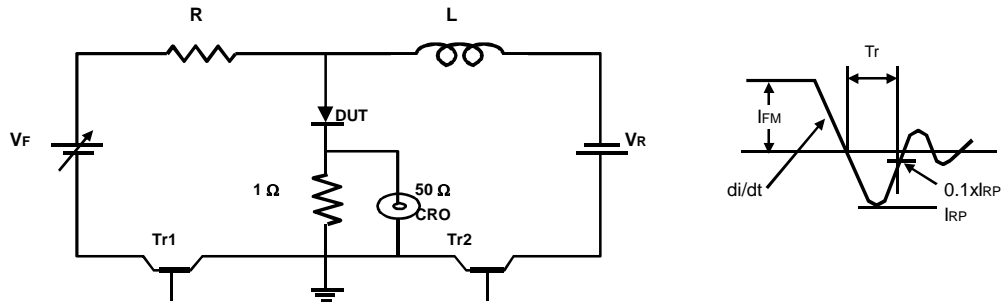


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

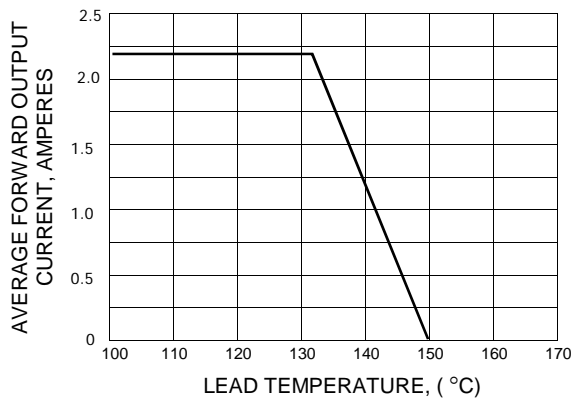


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

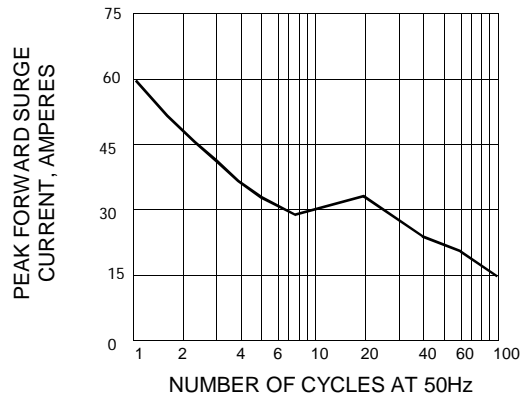


FIG.4 - INSTANTANEOUS FORWARD CHARACTERISTICS

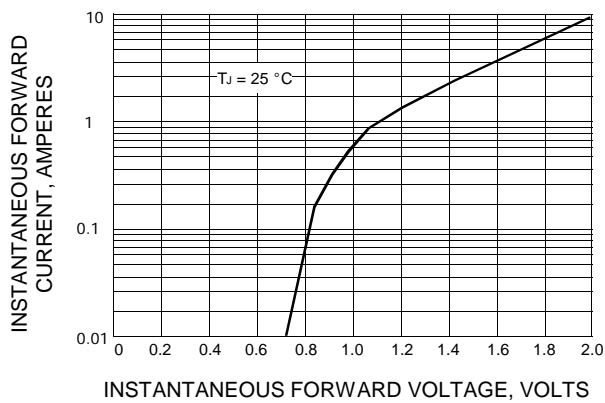


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

