

AL01

PRV : 400 Volts
Io : 1.0 Ampere

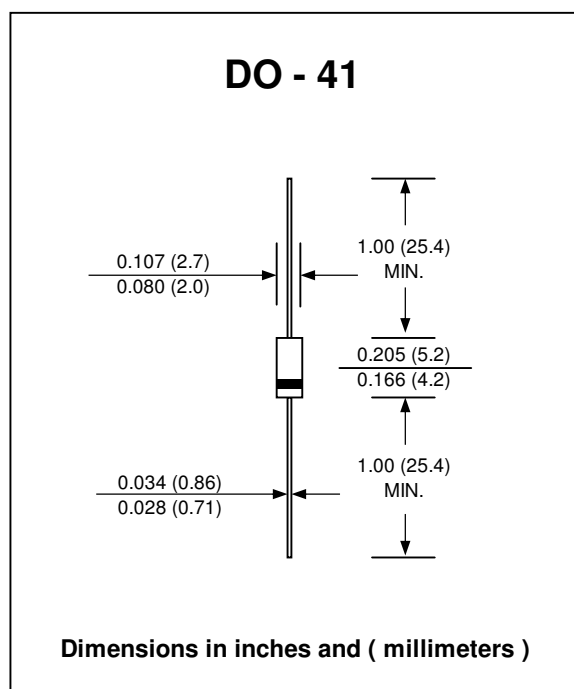
FEATURES :

- * 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-41 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 : 0.339 gram

ULTRA 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 Peak Reverse Voltage	V _{RM}	400	V
Maximum Average Rectified Forward Current	I _{F(AV)}	1	A
Maximum Peak Forward Surge Current (50 Hz, Half-cycle, Sine wave, Single Shot)	I _{FSM}	20	A
Maximum Forward Voltage at I _F = 1.0 A	V _F	1.4	V
Maximum Reverse Current at Reverse voltage	I _R	10	μA
Maximum Reverse Current at Reverse voltage T _j = 150 °C	I _{R(H)}	0.5	mA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	50	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 = 100 mA, I_{RP} = 100 mA.

RATING AND CHARACTERISTIC CURVES (AL01)

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

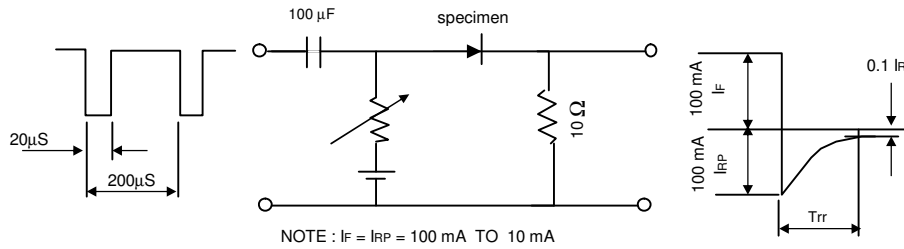


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

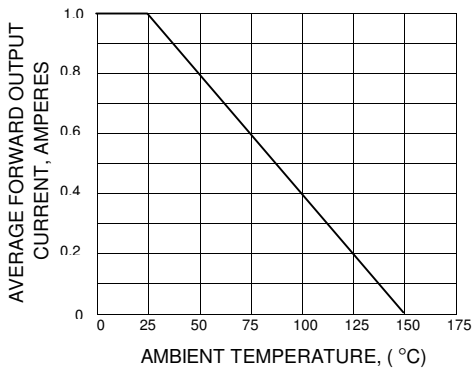


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

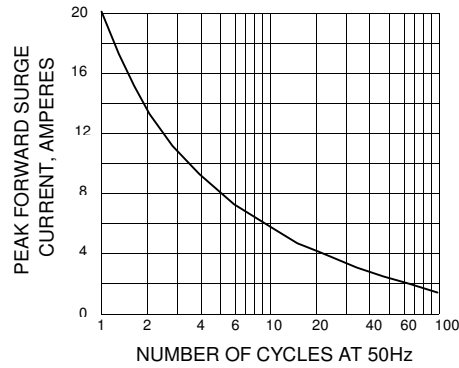


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

