Certificate Number: Q10561

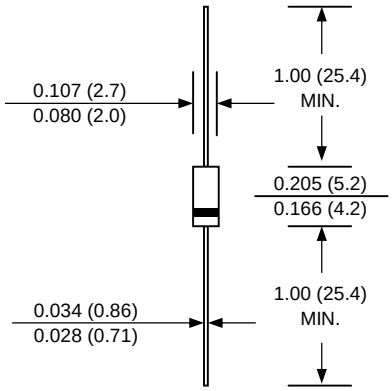
Certificate Number: E17276

AG01Y

ULTRA FAST RECOVERY RECTIFIER DIODE

PRV : 70 Volts
Io : 1.0 Ampere

DO - 41



Dimensions in inches and (millimeters)

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-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 : 0.339 gram

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%.

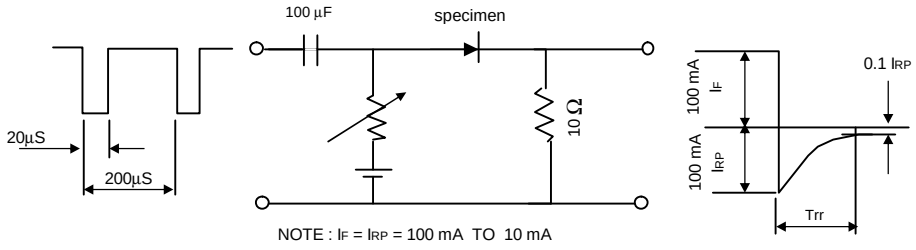
RATING	SYMBOL	VALUE	UNIT
Maximum Peak Reverse Voltage	V_{RM}	70	V
Maximum Peak Reverse Surge Voltage	V_{RSM}	70	V
Maximum Average Rectified Forward Current	$I_{F(AV)}$	1.0	A
Maximum Peak Forward Surge Current (50 Hz, Half-cycle, Sine wave, Single Shot)	I_{FSM}	25	A
Maximum Forward Voltage at I_F = 1.0 A	V_F	1.2	V
Maximum Reverse Current at $V_R = V_{RM}$, Ta = 25°C	I_R	0.1	mA
Maximum Reverse Current at $V_R = V_{RM}$, Ta = 100°C	$I_{R(H)}$	0.5	mA
Maximum Reverse Recovery Time (Note 1)	Trr	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 = 100 mA, I_{RP} = 100 mA.

RATING AND CHARACTERISTIC CURVES (AG01Y)

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



NOTE : I_F = I_{RP} = 100 mA TO 10 mA

FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

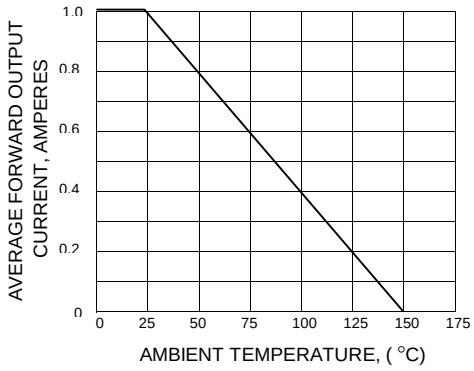


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

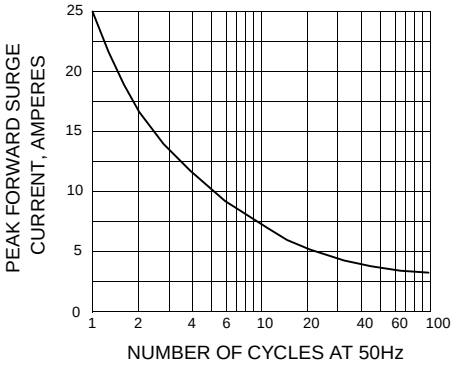


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

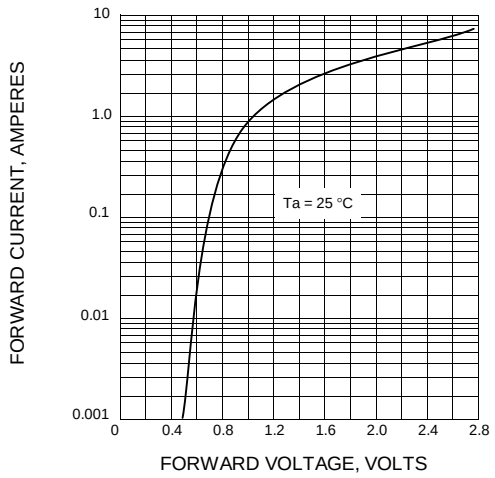
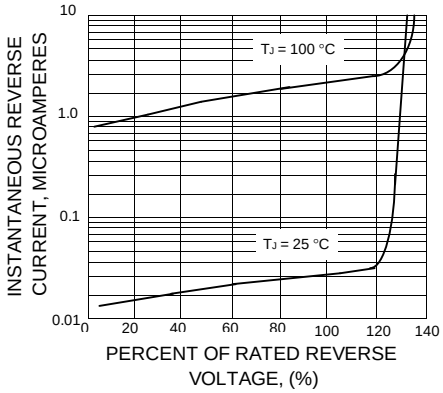



FIG.5 - TYPICAL REVERSE CHARACTERISTICS