

1N5802 - 1N5806

PRV : 50 - 150 Volts
Io : 2.5 Amperes

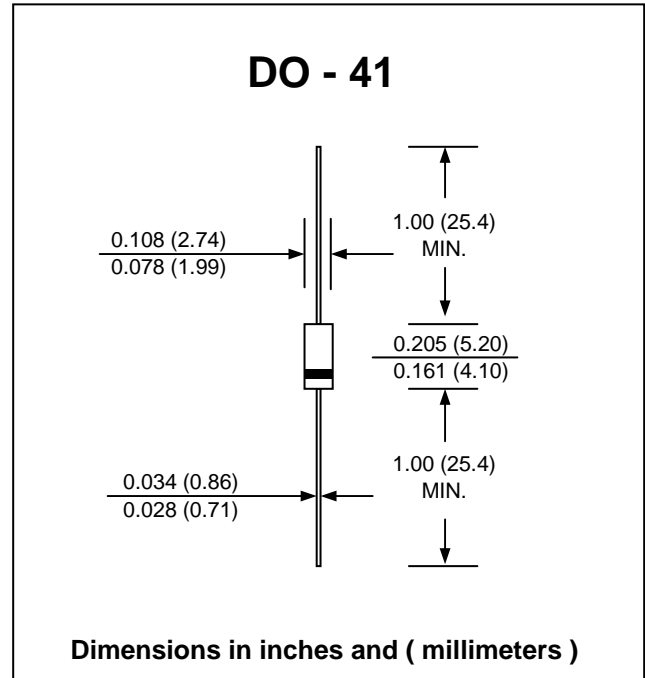
FEATURES :

- * Glass passivated chip
- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Ultrafast recovery time
- * 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

GLASS PASSIVATED JUNCTION ULTRA FAST RECTIFIERS



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	1N5802	1N5803	1N5804	1N5805	1N5806	UNIT
Maximum Working Peak Reverse Voltage	VRWM	50	75	100	125	150	V
Minimum Breakdown Voltage @ 100µA	VBR(Min)	55	80	110	135	160	V
Maximum Average Forward Current	IF(AV)	2.5 (T _L = 75°C, Note 1)					A
		1.0 (Ta = 55°C)					
Maximum Peak Forward Surge Current, 8.3ms Single half sine wave superimposed on rated load (JEDEC Method)	IFSM	35					A
Maximum Peak Forward Voltage at IF = 1.0 A.	VF	0.875					V
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	1.0					µA
	IR(H)	50 (Ta = 100°C)					
Maximum Reverse Recovery Time (Note 2)	Trr	25					ns
Typical Junction Capacitance (Note 3)	CJ	25					pF
Junction Temperature Range	TJ	- 65 to + 175					°C
Storage Temperature Range	TSTG	- 65 to + 175					°C

Notes :

- (1) I_{F(AV)} = 2.5A @ T_L=75°C at 3/8 inc lead length. Derate at 25mA/°C for T_L above 75°C.
- (2) Reverse Recovery Test Conditions : IF = 0.5 A, IR = 1.0 A, Irr = 0.25 A.
- (3) Measured at 1 MHz and applied reverse voltage of 4.0 volts.