

UG2A - UG2D

PRV : 50 ~ 200 Volts
Io : 2.0 Ampere

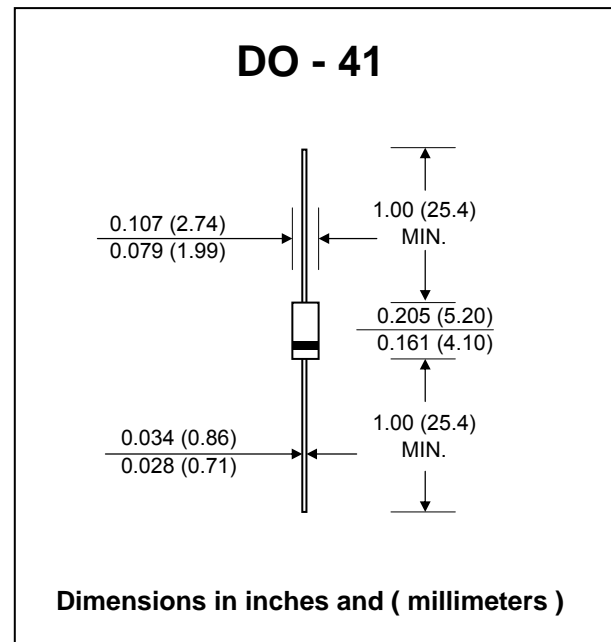
FEATURES :

- * Glass passivated chip junction
- * High forward surge capability
- * High efficiency
- * Low switching losses
- * Low forward voltage drop
- * Ultrafast reverse 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
- * Weight : 0.335 gram

ULTRA FAST RECTIFIERS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	UG2A	UG2B	UG2C	UG2D	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	V
Maximum Average Forward Current $T_a = 50\text{ }^\circ\text{C}$	$I_{F(AV)}$	2.0				A
Maximum non-repetitive peak forward current 8.3ms Single half sine wave superimposed on rated load	I_{FSM}	80				A
Maximum Instantaneous Forward Voltage at $I_F = 2.0\text{ A}^{(1)}$	V_F	0.95				V
Maximum DC Reverse Current $T_a = 25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 100\text{ }^\circ\text{C}$	I_R	5				μA
	$I_{R(H)}$	200				μA
Maximum Reverse Recovery Time ⁽²⁾	T_{rr}	15				ns
Typical Junction Capacitance(at 4V, 1MHz)	C_J	15				pF
Typical Thermal Resistance ⁽³⁾	$R_{\theta JA}$	45				$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	- 55 to + 150				$^\circ\text{C}$

Notes :

- (1) Pulse test: 300 μs pulse width, 1 % duty cycle.
- (2) Reverse Recovery Test Conditions : $I_F = 0.5\text{ A}$, $I_R = 1.0\text{ A}$, $I_{rr} = 0.25\text{ A}$.
- (3) Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length.

RATING AND CHARACTERISTIC CURVES (UG2A - UG2D)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

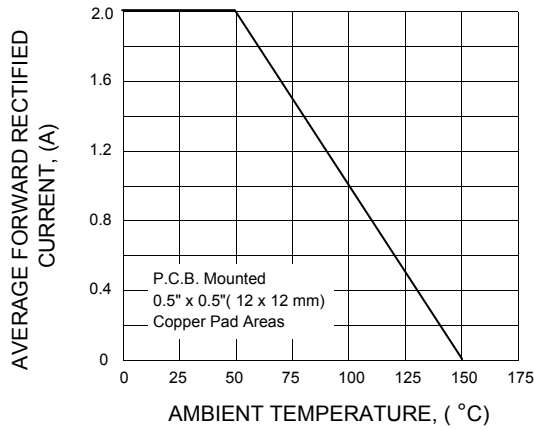


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

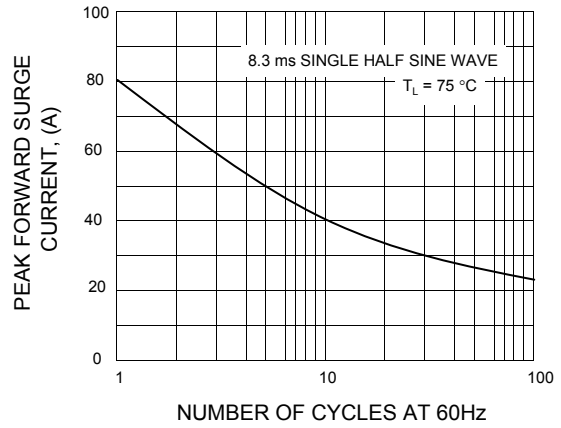


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

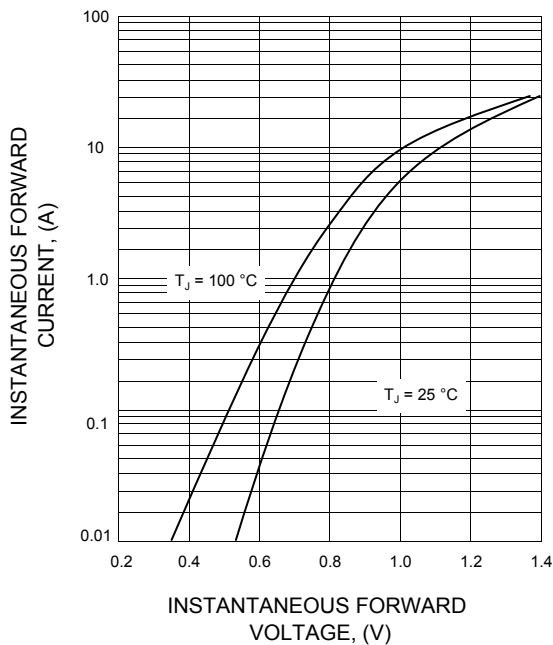


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

