

MUR2100

PRV : 1000 Volts

Io : 2.0 Amperes

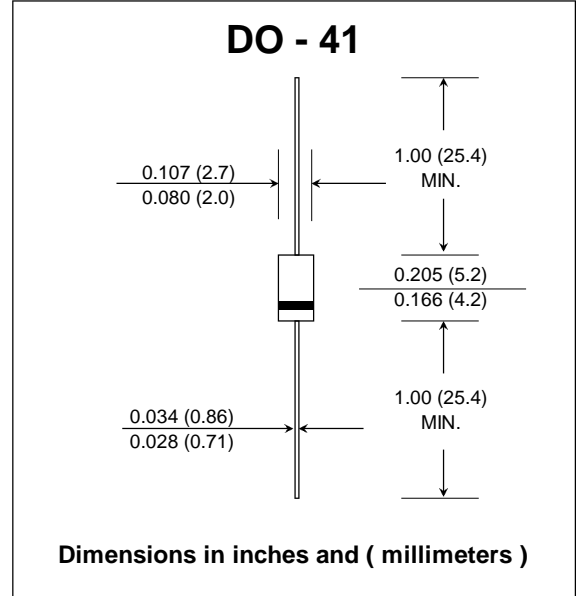
FEATURES :

- * Ultrafast 75 Nanoescond Recovery Time
- * High Temperature Glass Passivated Junction
- * Low Forward Voltage
- * Low Leakage Current
- * 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

ULTRAFAST RECTIFIER



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}	1000	V
Maximum Working Reverse Voltage	V_{RWM}	1000	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Maximum Average Forward Current @ $T_A = 35\text{ }^\circ\text{C}$	$I_{F(AV)}$	2.0	A
Maximum Non-repetitive Peak Forward Surge Current (Surge applied at rated load condition, halfwave, single phase, 60 Hz)	I_{FSM}	35	A
Maximum Instantaneous Forward Voltage at $I_F = 2.0\text{ A}$ (Note 1)	V_F	2.2	V
Maximum Instantaneous Reverse Current (Note 1) (Rated DC Voltage, $T_J = 25\text{ }^\circ\text{C}$) (Rated DC Voltage, $T_J = 100\text{ }^\circ\text{C}$)	I_R	10	μA
	$I_{R(H)}$	600	μA
Maximum Reverse Recovery Time (Note 2)	T_{rr}	75	ns
Junction Temperature Range	T_J	- 65 to + 175	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 65 to + 175	$^\circ\text{C}$

Notes :

- (1) Pulse Test : Pulse Width = 300 μs , Duty Cycle $\leq 2.0\%$
- (2) Reverse Recovery Test Conditions : $I_F = 0.5\text{A}$, $I_R = 1\text{A}$; $I_{rr} = 0.25\text{ A}$

RATING AND CHARACTERISTIC CURVES (MUR2100)

FIG. 1 - CURRENT DERATING

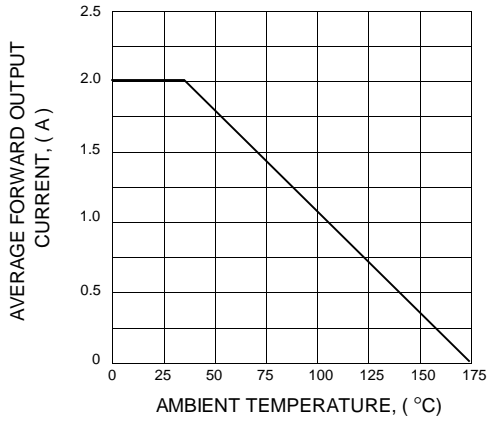


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

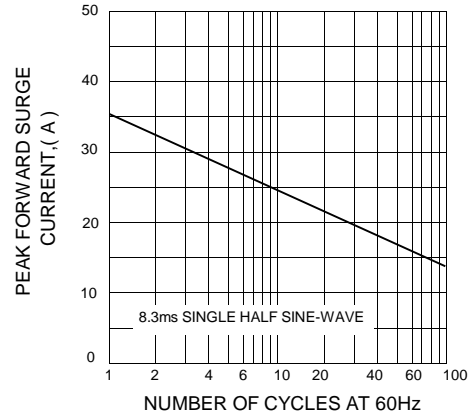


FIG. 3 - TYPICAL FORWARD VOLTAGE

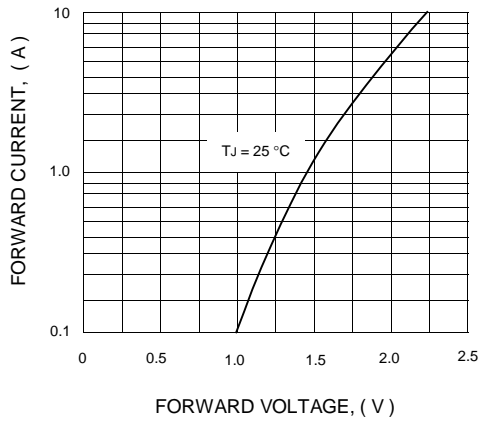


FIG. 4 - TYPICAL REVERSE CURRENT

