

UHVR112

HIGH VOLTAGE ULTRAFAST RECTIFIER DIODE

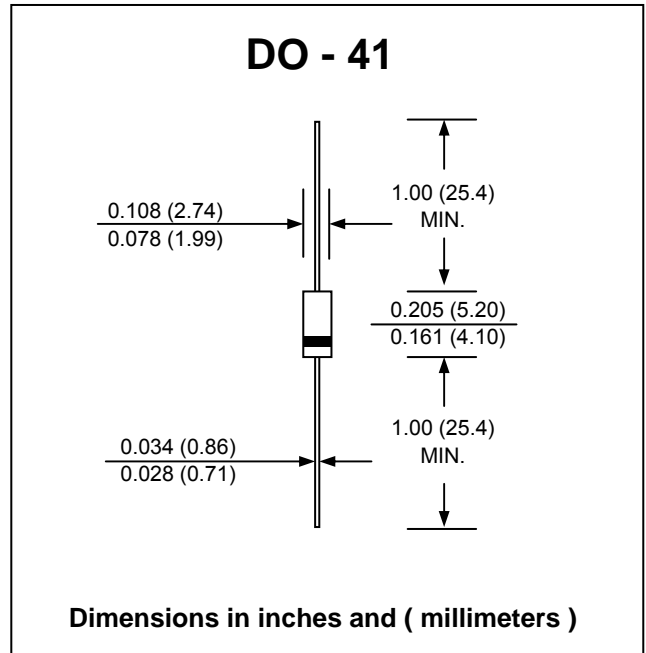
PRV : 1200 Volts
Io : 1.0 Ampere

FEATURES :

- * Glass passivated junction chip
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * **Pb Free / RoHS Compliant**

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 : 0.34 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1200	V
Maximum RMS Voltage	V_{RMS}	840	V
Maximum DC Blocking Voltage	V_{DC}	1200	V
Maximum Average Forward Current $T_a = 75\text{ °C}$	$I_{F(AV)}$	1.0	A
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	30	A
Maximum Peak Forward Voltage at $I_F = 1.0\text{ A}$	V_F	2.2	V
Maximum DC Reverse Current $T_a = 25\text{ °C}$ at Rated DC Blocking Voltage $T_a = 100\text{ °C}$	I_R	5.0	μA
	$I_{R(H)}$	100	μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	75	ns
Typical Thermal Resistance	$R_{\theta JA}$	110	$^{\circ}\text{C/W}$
Operating Junction Temperature	T_J	175	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	- 50 to + 175	$^{\circ}\text{C}$

Note :

(1) Reverse Recovery Test Conditions : $I_F = 0.5\text{ A}$, $I_R = 1.0\text{ A}$, $I_{rr} = 0.25\text{ A}$.

RATING AND CHARACTERISTIC CURVES (UHVR112)

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

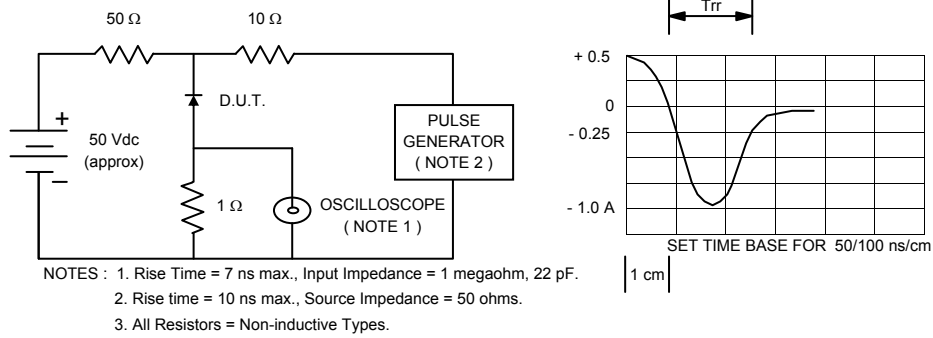


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

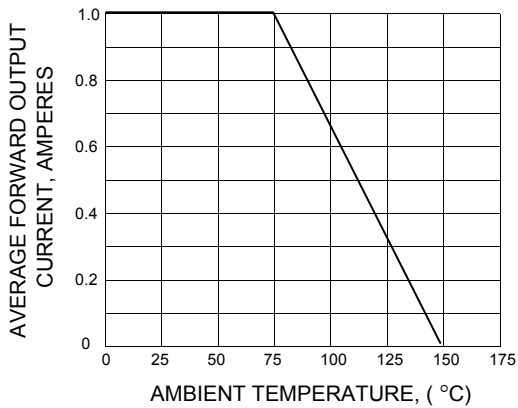


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

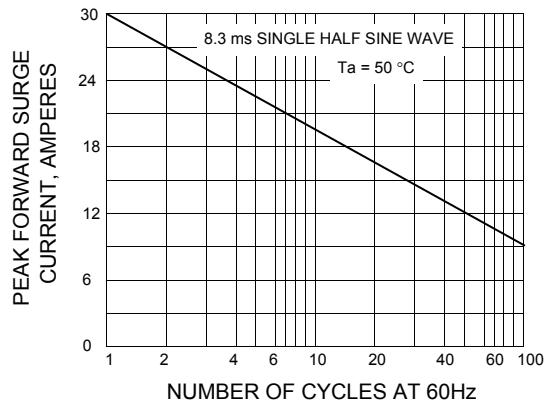


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

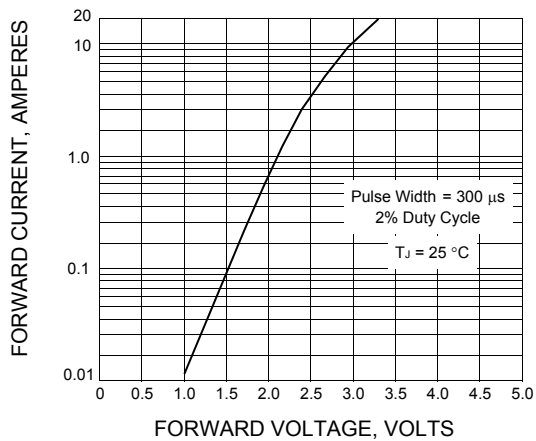


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

