

FHVR120

PRV : 2000 Volts

Io : 1.0 Ampere

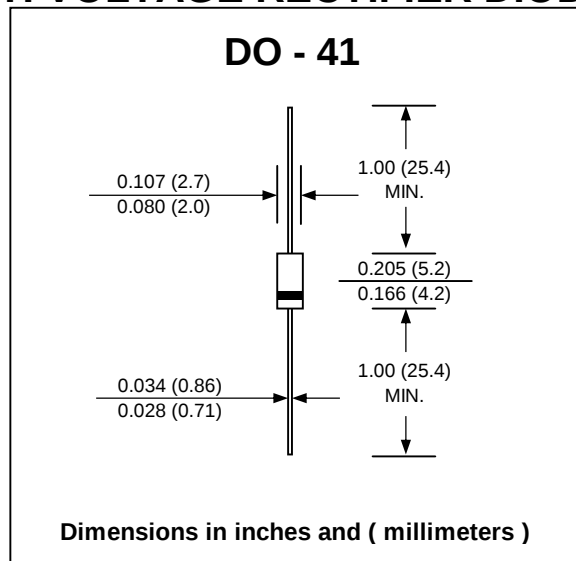
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * **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 : 0.34 gram

FAST RECOVERY HIGH VOLTAGE RECTIFIER DIODE



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	VRRM	2000	V
Maximum RMS Voltage	VRMS	1400	V
Maximum DC Blocking Voltage	VDC	2000	V
Maximum Average Forward Current Ta = 75°C	IF(AV)	1.0	A
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	IFSM	30	A
Maximum Peak Forward Voltage at IF = 1.0 Amp.	VF	2.6	V
Maximum DC Reverse Current Ta = 25°C at Rated DC Blocking Voltage Ta = 100°C	IR	5.0	µA
	IR(H)	100	µA
Maximum Reverse Recovery Time (Note 1)	Trr	500	ns
Typical Junction Capacitance (Note 2)	Cj	36	pF
Typical Thermal Resistance (Note 3)	RθJA	28	°C/W
Junction Temperature Range	TJ	- 40 to + 150	°C
Storage Temperature Range	TSTG	- 40 to + 150	°C

Notes :

- (1) Reverse Recovery Test Conditions : $I_F = 0.5 \text{ A}$, $I_R = 1.0 \text{ A}$, $I_{RR} = 0.25 \text{ A}$.
 (2) Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
 (3) Thermal resistance from Junction to Ambient at 0.375" (9.5mm) Lead Lengths, P.C. Board Mounted.

RATING AND CHARACTERISTIC CURVES (FHVR120)

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

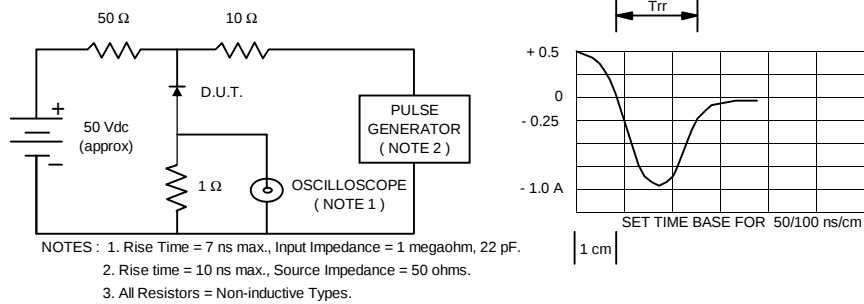


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

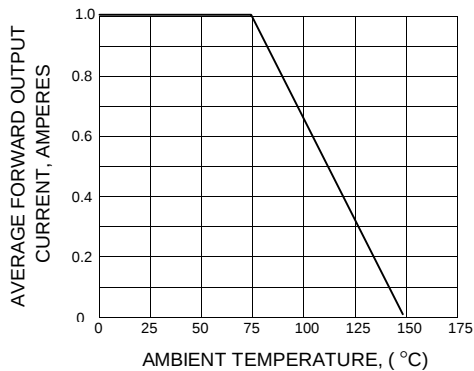


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

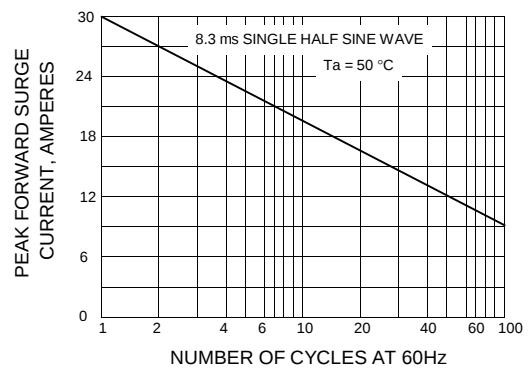


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

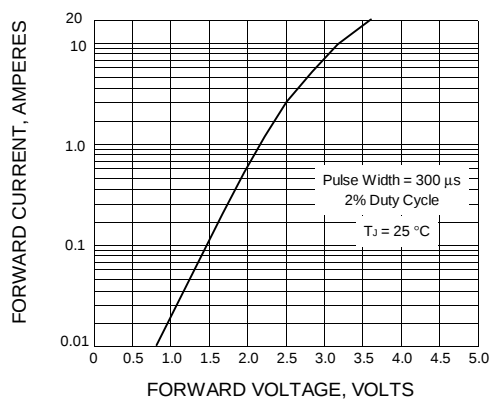


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

