

TVR06J

PRV : 600 Volts
Io : 0.6 Ampere

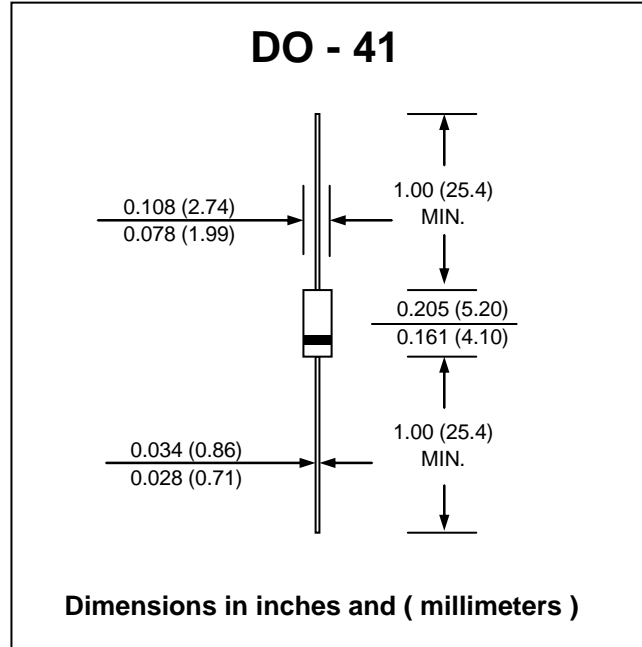
FEATURES :

- * Glass passivated chip junction
- * High surge current capability
- * High reliability
- * Low reverse current
- * Fast switching for high efficiency
- * **Pb Free / RoHS Compliance**

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

FAST RECOVERY 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 Recurrent Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS Voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward Current 3/8" Lead Length at Ta = 55 °C	$I_{F(AV)}$	0.6	A
Peak Forward Surge Current, 8.3ms Single half sine wave Superimposed on rated load	I_{FSM}	30	A
Maximum Peak Forward Voltage at $I_F = 0.6 A$	V_F	1.3	V
Maximum Full load Reverse Current, Full Cycle Average Full Cycle Average at Ta = 55°C	$I_{R(AV)}$	100	μA
Maximum DC Reverse Current at Rated DC Blocking Voltage	Ta = 25 °C I_R	5.0	μA
	Ta = 125 °C $I_{R(H)}$	100	μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	250	ns
Typical Junction Capacitance (Note 2)	C_J	15	pf
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	55	°C/W
Operating Junction Temperature Range	T_J	- 65 to + 175	°C
Storage Temperature Range	T_{STG}	- 65 to + 175	°C

Notes :

- (1) Reverse Recovery Test Conditions $I_F = 0.5 A$, $I_R = 1.0 A$, $I_{rr} = 0.25 A$.
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Vdc
- (3) Thermal Resistance from Junction to Ambient at 3/8" Lead Lengths, P.C. Board Mounted.

RATING AND CHARACTERISTIC CURVES (TVR06J)

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

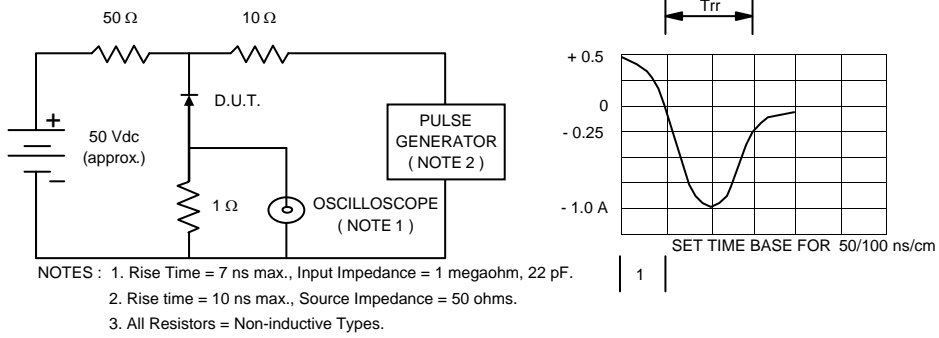


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

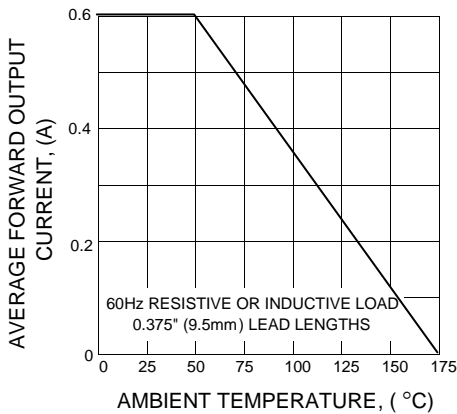


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

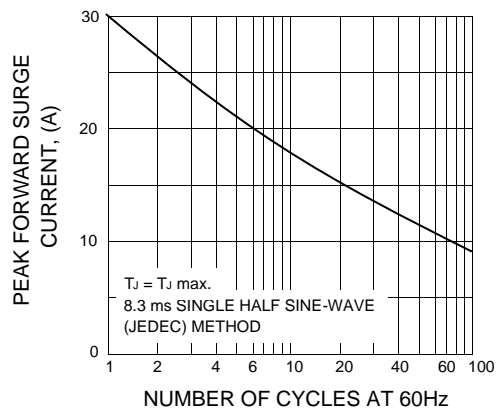


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

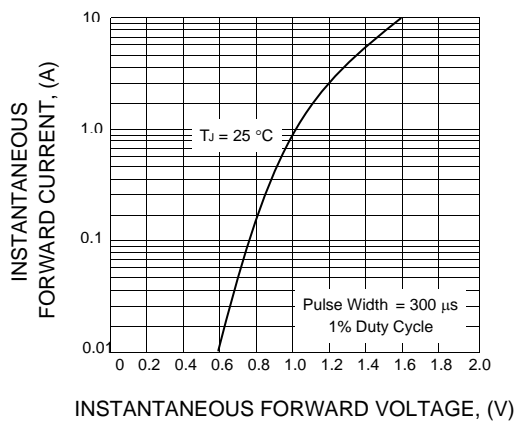


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

