

# TVR1B/G/J

**PRV : 100 - 600 Volts**  
**Io : 0.5 Ampere**

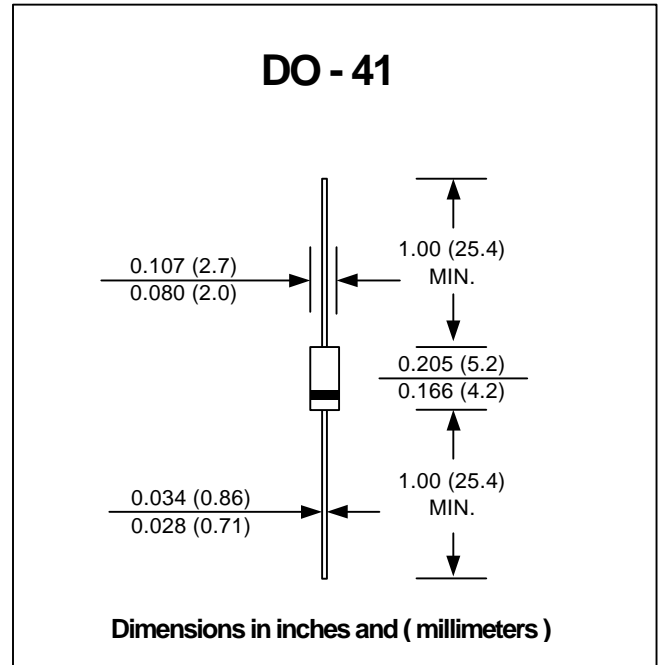
**FEATURES :**

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Fast switching for high efficiency
- \* **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

# FAST RECOVERY RECTIFIER DIODES



**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	TVR1B	TVR1G	TVR1J	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	100	400	600	V
Maximum Average Forward Current	IF(AV)	0.5			A
Maximum Peak One Cycle Surge Forward Current ( Non-repetitive )	IFSM	10 (50 Hz)			A
Maximum Peak Forward Voltage at IF = 0.5 A	VF	1.2			V
Maximum Repetitive Reverse Current at VRRM	IRRM	10			µA
Maximum Reverse Recovery Time	Trr(1)	300 (Typ.)			ns
	Trr(2)	75			ns
Junction Temperature Range	TJ	- 40 to + 125			°C
Storage Temperature Range	TSTG	- 40 to + 125			°C

**Notes :**

- ( 1 ) Reverse Recovery Test Conditions : IF = 100 mA, IR = 100 mA.
- ( 2 ) Reverse Recovery Test Conditions : IF = 0.5 A, IR = 1.0 A, Irr = 0.25 A.

## RATING AND CHARACTERISTIC CURVES ( TVR1B/G/J )

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

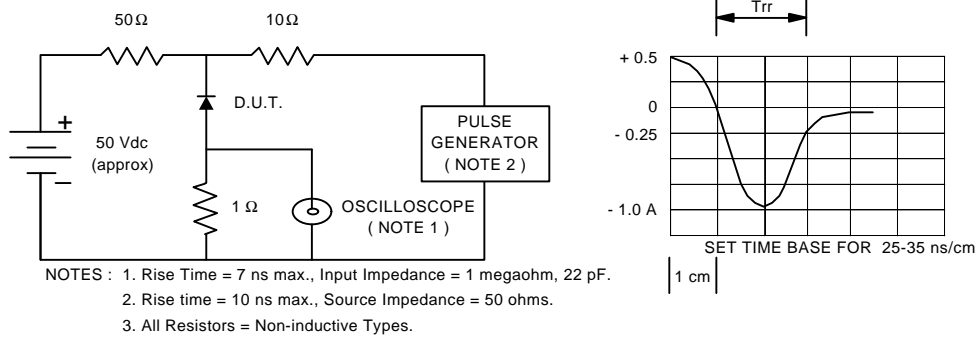


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

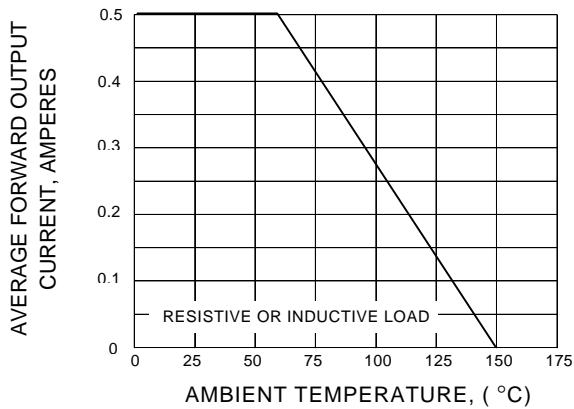


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

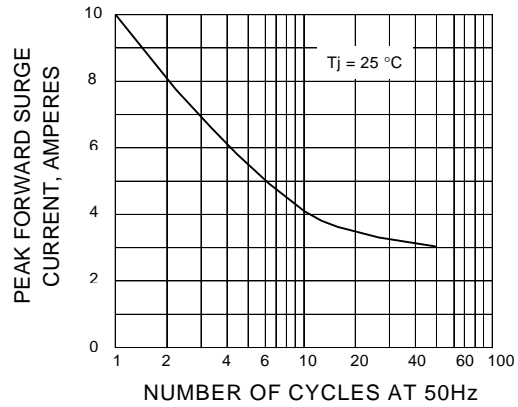


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

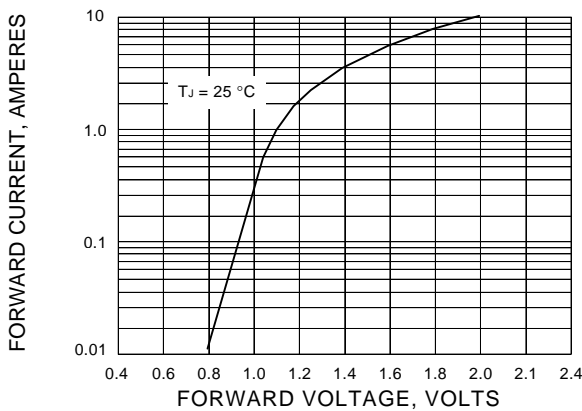


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

