

# EU1C

**PRV : 1000 Volts**  
**Io : 0.2 Ampere**

## FEATURES :

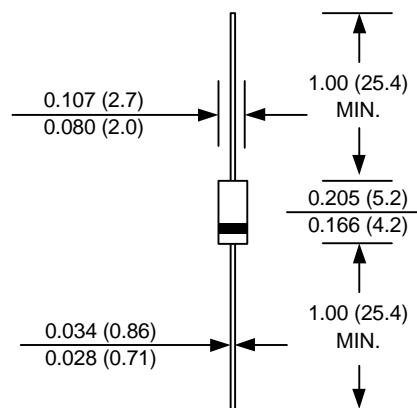
- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Fast switching for high efficiency
- \* **Pb / RoHS Free**

## 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 DIODE

## DO - 41



**Dimensions in inches and ( millimeters )**

## 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%.

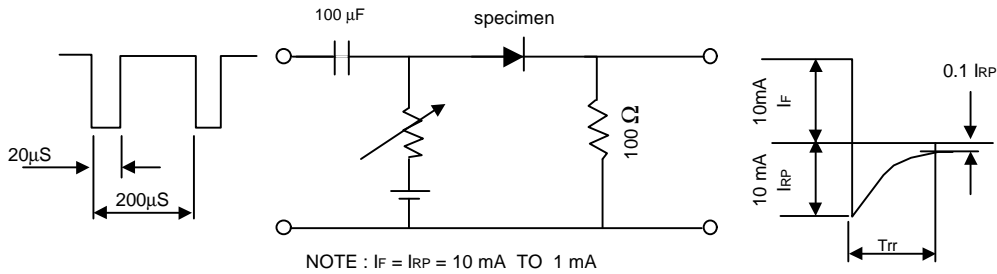
RATING	SYMBOL	VALUE	UNIT
Maximum Peak Reverse Voltage	$V_{RM}$	1000	V
Maximum Peak Reverse Surge Voltage	$V_{RSM}$	1050	V
Maximum Reverse Voltage	$V_R$	1000	V
Maximum Average Forward Current	$I_{F(AV)}$	0.2	A
Maximum Peak Forward Surge Current ( 50 Hz, Half-cycle, Sine wave, Single Shot )	$I_{FSM}$	15	A
Maximum Forward Voltage at $I_F = 0.2$ A	$V_F$	2.5	V
Maximum Reverse Current at Reverse Voltage $T_a = 25$ °C	$I_R$	10	$\mu$ A
Maximum Reverse Current at Reverse Voltage $T_a = 100$ °C	$I_{R(H)}$	150	$\mu$ A
Maximum Reverse Recovery Time ( Note 1 )	$T_{rr}$	0.4	$\mu$ s
Junction Temperature Range	$T_J$	- 40 to + 150	°C
Storage Temperature Range	$T_{STG}$	- 40 to + 150	°C

## Notes :

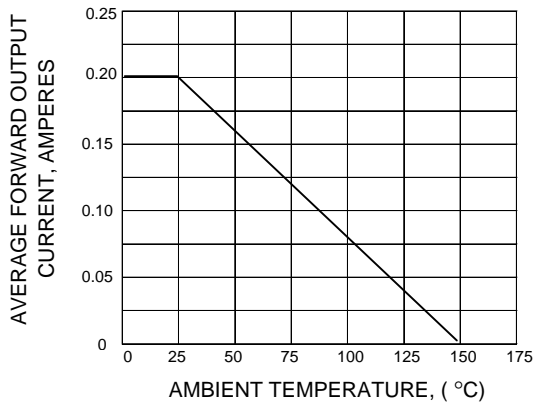
( 1 ) Reverse Recovery Test Conditions :  $I_F = 10$  mA,  $I_{RP} = 10$  mA.

## RATING AND CHARACTERISTIC CURVES (EU1C)

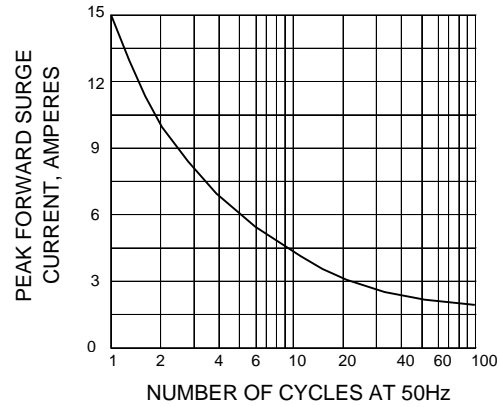
**FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



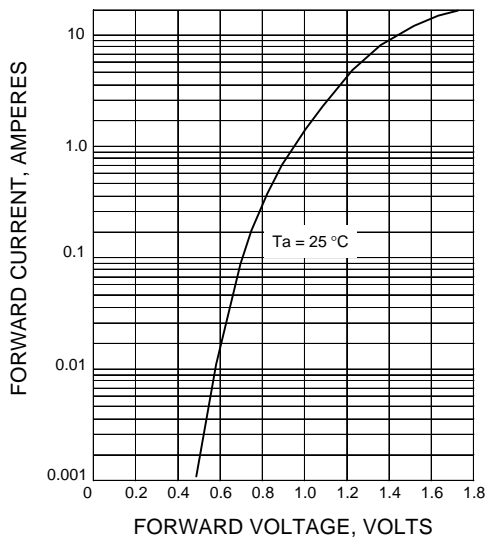
**FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

