

# EU1C

**PRV : 1000 Volts**

**Io : 0.2 Ampere**

## FEATURES :

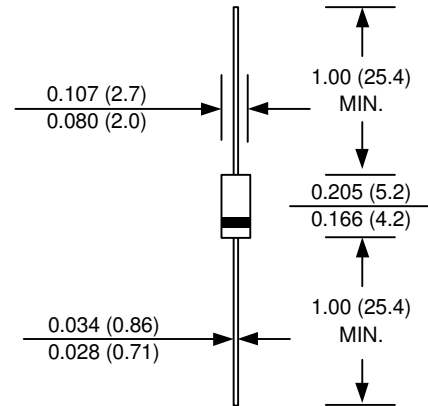
- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Fast switching for high efficiency
- \* **Pb / RoHS Free**

## 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	VRM	1000	V
Maximum Peak Reverse Surge Voltage	VRSM	1050	V
Maximum Reverse Voltage	VR	1000	V
Maximum Average Forward Current	IF(AV)	0.2	A
Maximum Peak Forward Surge Current ( 50 Hz, Half-cycle, Sine wave, Single Shot )	IFSM	15	A
Maximum Forward Voltage at IF = 0.2 A	VF	2.5	V
Maximum Reverse Current at Reverse Voltage Ta = 25 °C	IR	10	μA
Maximum Reverse Current at Reverse Voltage Ta = 100 °C	IR(H)	150	μA
Maximum Reverse Recovery Time ( Note 1 )	Trr	0.4	μs
Junction Temperature Range	TJ	- 40 to + 150	°C
Storage Temperature Range	TSTG	- 40 to + 150	°C

### Notes :

( 1 ) Reverse Recovery Test Conditions : IF = 10 mA, IRRP = 10 mA.

## RATING AND CHARACTERISTIC CURVES ( EU1C )

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

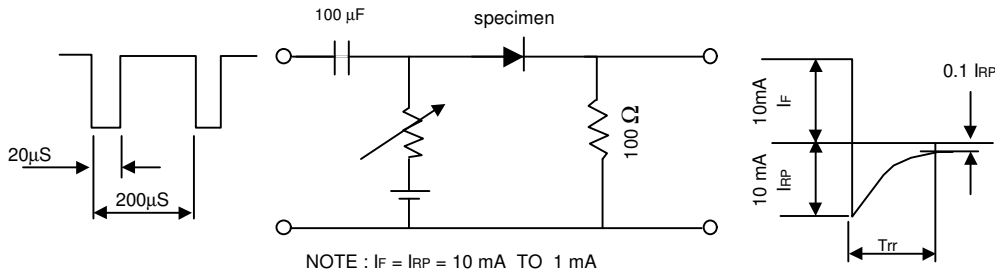


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

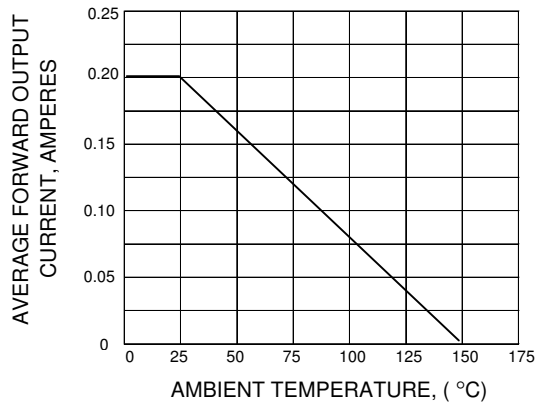


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

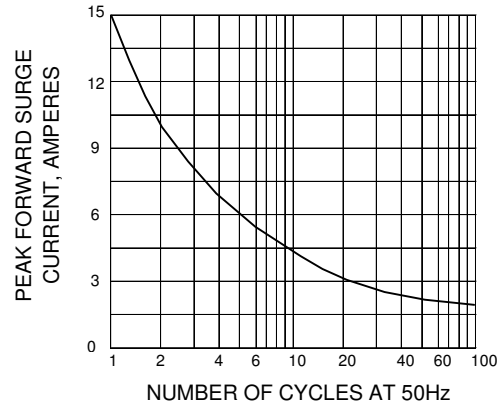


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

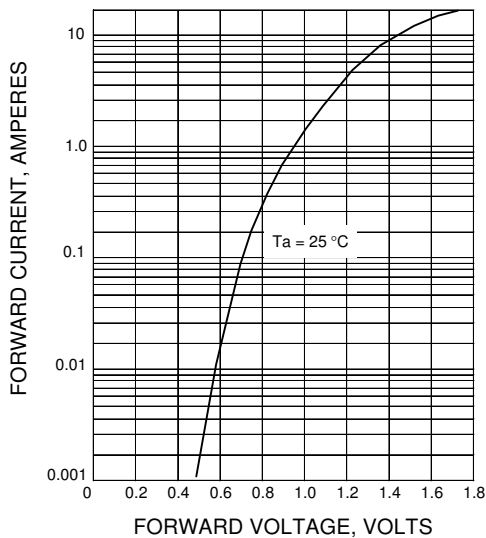


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

