

# MUR1100E

**PRV : 1000 Volts**  
**Io : 1.0 Amperes**

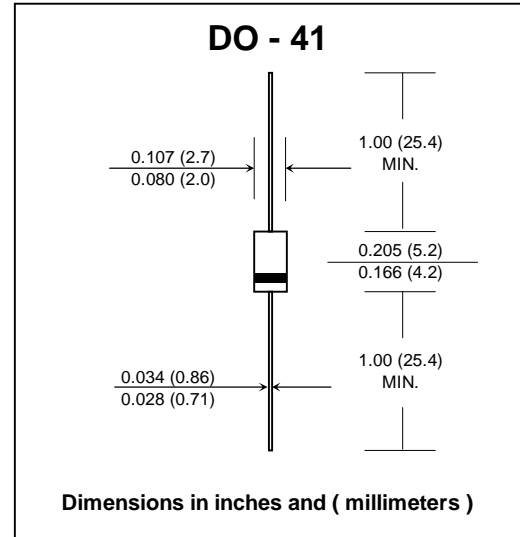
### FEATURES :

- \* Ultrafast 75 Nanoseconds Recovery Time
- \* High Temperature
- \* Low Forward Voltage
- \* Low Leakage Current
- \* 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

## ULTRAFAST RECTIFIERS



### 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%.

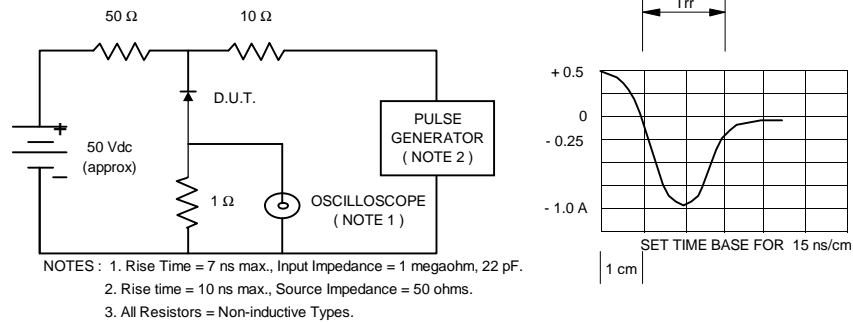
RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	1000	V
Maximum Working Reverse Voltage	VRWM	1000	V
Maximum DC Blocking Voltage	VDC	1000	V
Maximum Average Forward Current	IF(AV)	1.0 @ T <sub>A</sub> = 95 °C	A
Maximum Non-repetitive Peak Forward Surge Current	IFSM	35	A
Maximum Instantaneous Forward Voltage at I <sub>F</sub> = 1 Amp. (Note 1)	VF	1.75	V
Maximum Instantaneous Reverse Current at	IR	10 ( T <sub>J</sub> = 25 °C )	μA
Rated DC Blocking Voltage	IR(H)	600 ( T <sub>J</sub> = 100 °C )	μA
Maximum Reverse Recovery Time ( Note 2 )	T <sub>rr</sub>	75	ns
Junction Temperature Range	T <sub>J</sub>	- 65 to + 175	°C
Storage Temperature Range	T <sub>STG</sub>	- 65 to + 175	°C

#### Notes :

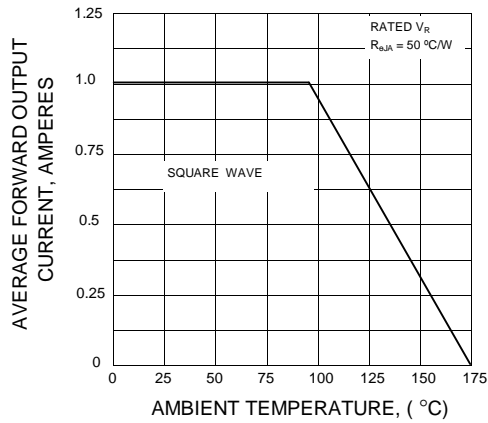
- (1) Pulse Test : Pulse Width = 300 μs, Duty Cycle ≤ 2.0%
- (2) Reverse Recovery Test Conditions : I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1A ; I<sub>rr</sub> = 0.25 A

## RATING AND CHARACTERISTIC CURVES ( MUR1100E )

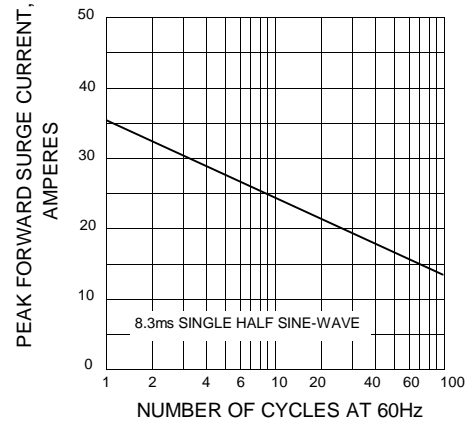
**FIG. 1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



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



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



**FIG. 4 - TYPICAL FORWARD CHARACTERISTICS**

