

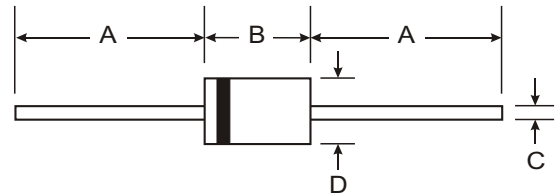
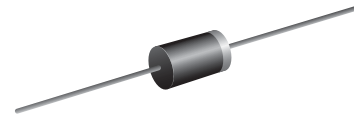
**VOLTAGE RANGE: 200 - 600V**  
**CURRENT: 1.0 A**

### Features

- Diffused junction
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with freon, Alcohol, Isopropanol and similar solvents

### Mechanical Data

- Case: DO-41, molded plastic
- Terminals: Axial leads, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode
- Weight: 0.012 ounces, 0.34 grams
- Mounting: Any



DO-41		
Dim	Min	Max
A	25.40	—
B	4.06	5.21
C	0.71	0.864
D	2.00	2.72
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

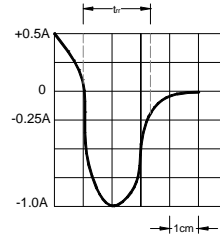
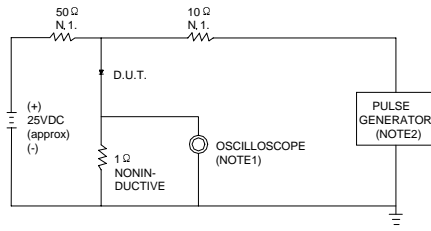
Characteristic	Symbol	EU02Z	EU02	EU02A	Unit
Maximum peak repetitive reverse voltage	V <sub>RRM</sub>	200	400	600	V
Maximum RMS voltage	V <sub>RMS</sub>	140	280	420	V
Maximum DC blocking voltage	V <sub>DC</sub>	200	400	600	V
Maximum average forward rectified current 9.5mm lead length @T <sub>A</sub> =75°C	I <sub>F(AV)</sub>	1.0			A
Peak forward surge current 10ms single half-sine-wave superimposed on rated load @T <sub>J</sub> =125°C	I <sub>FSM</sub>	15.0			A
Maximum instantaneous forward voltage @ 1.0A	V <sub>F</sub>	1.4			V
Maximum reverse current @T <sub>A</sub> =25°C at rated DC blocking voltage @T <sub>A</sub> =100°C	I <sub>R</sub>	10.0 300.0			μA
Maximum reverse recovery time (Note1)	t <sub>rr</sub>	100			ns
Typical junction capacitance (Note2)	C <sub>J</sub>	20	15		pF
Typical thermal resistance (Note3)	R <sub>θJL</sub>	20			°C/W
Operating junction temperature range	T <sub>J</sub>	- 55 ----- + 150			°C
Storage temperature range	T <sub>STG</sub>	- 55 ----- + 150			°C

NOTE:1. Measured with I<sub>F</sub>=0.5A, I<sub>R</sub>=1A, I<sub>rr</sub>=0.25A.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal resistance junction to ambient.

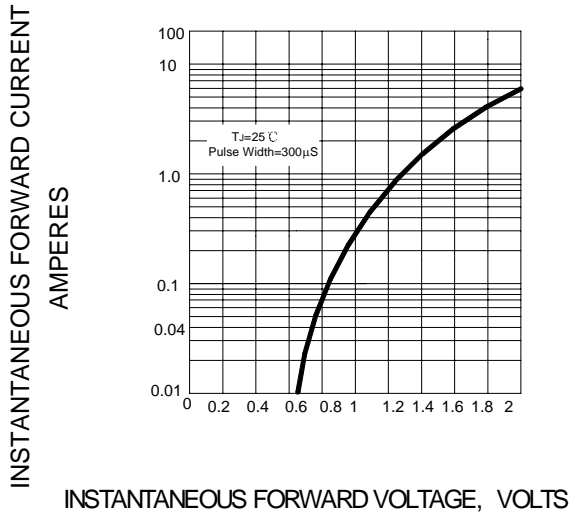
**FIG.1 – TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC**



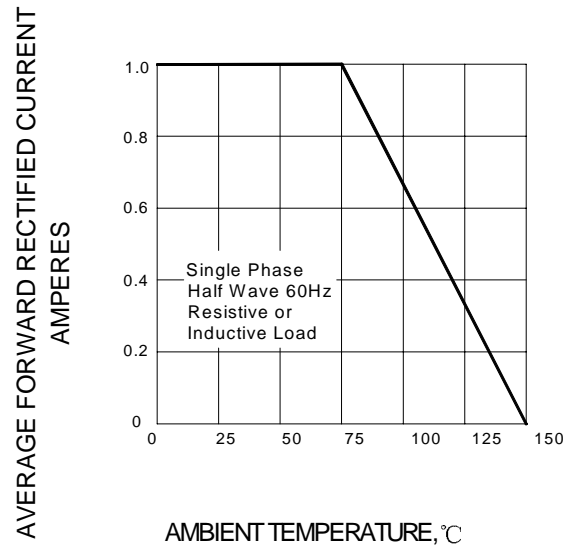
NOTES:1.RISE TIME = 7ns MAX INPUT IMPEDANCE =  $1M\Omega$ , 22pF.  
2.RISE TIME = 10ns MAX SOURCE IMPEDANCE = 50  $\Omega$ .

SET TIME BASE FOR 10/20 ns/cm

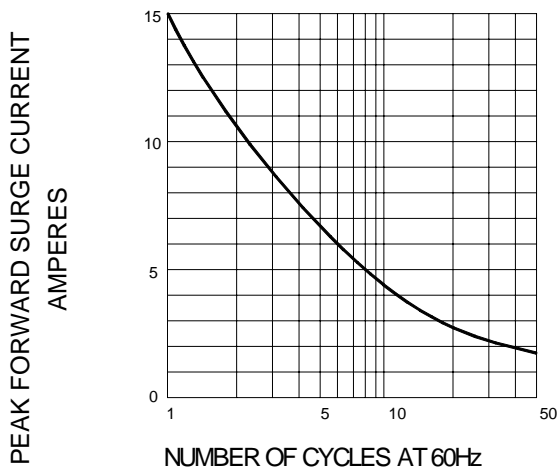
**FIG.2 – TYPICAL FORWARD CHARACTERISTIC**



**FIG.3 – FORWARD DERATING CURVE**



**FIG.4 – PEAK FORWARD SURGE CURRENT**



**FIG.5 – TYPICAL JUNCTION CAPACITANCE**

