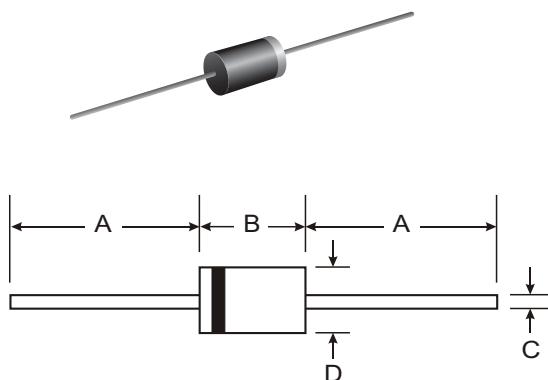


VOLTAGE RANGE: 200 - 600V
CURRENT: 1.0 A
Features

- 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 $T_A = 25^\circ\text{C}$ 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_{RRM}	200	400	600	V
Maximum RMS voltage	V_{RMS}	140	280	420	V
Maximum DC blocking voltage	V_{DC}	200	400	600	V
Maximum average forward rectified current 9.5mm lead length @ $T_A=75^\circ\text{C}$	$I_{F(AV)}$	1.0			A
Peak forward surge current 10ms single half-sine-wave superimposed on rated load @ $T_J=125^\circ\text{C}$	I_{FSM}	15.0			A
Maximum instantaneous forward voltage @ 1.0A	V_F	1.4			V
Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$	I_R	10.0 300.0			μA
Maximum reverse recovery time (Note1)	t_{rr}	100			ns
Typical junction capacitance (Note2)	C_J	20	15		pF
Typical thermal resistance (Note3)	$R_{\theta JL}$	20			$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J	- 55 ----- + 150			$^\circ\text{C}$
Storage temperature range	T_{STG}	- 55 ----- + 150			$^\circ\text{C}$

NOTE:1. Measured with $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{rr}=0.25\text{A}$.

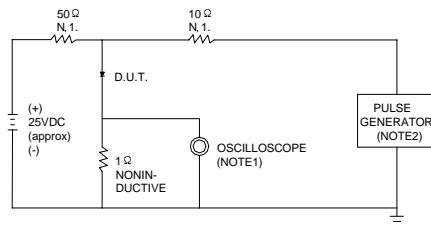
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal resistance junction to ambient.



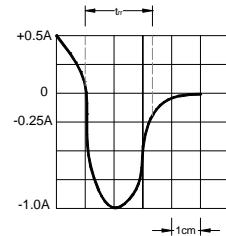
SUNMATE

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



NOTES: 1. RISE TIME = 7ns MAX INPUT IMPEDANCE = 1MΩ. 22pF.

2. RISE TIME = 10ns MAX SOURCE IMPEDANCE = 50 Ω.



SET TIME BASE FOR 10/20 ns/cm

FIG.2 – TYPICAL FORWARD CHARACTERISTIC

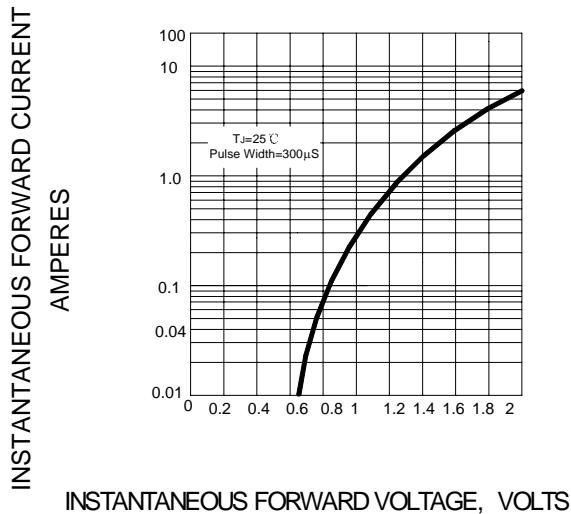


FIG.3 – FORWARD DERATING CURVE

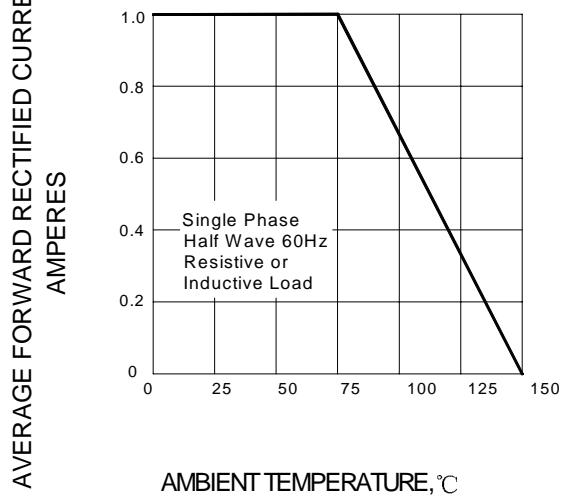


FIG.4 – PEAK FORWARD SURGE CURRENT

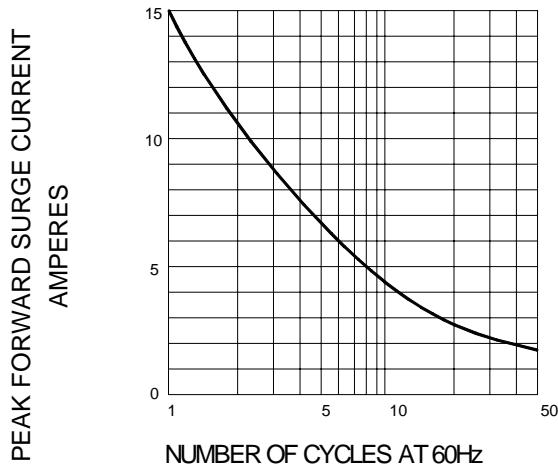


FIG.5 – TYPICAL JUNCTION CAPACITANCE

