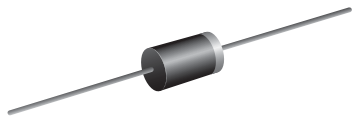
EU01Z - EU01A

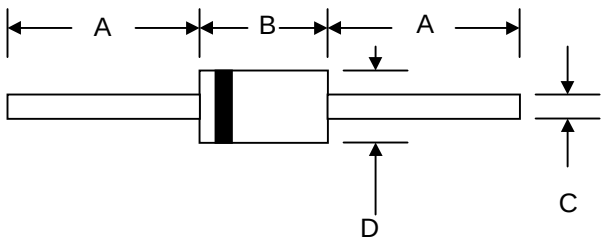
HIGH EFFICIENCY RECTIFIER DIODES

VOLTAGE RANGE: 200 - 600V
CURRENT: 0.25 A



Features

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



DO-41		
Dim	**Min**	**Max**
A	25.4	—
B	4.06	5.21
C	0.71	0.864
D	2.00	2.72
All Dimensions in mm		

Mechanical Data

- Case: D O - 4 1 Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.34 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

RoHS COMPLIANT

Maximum Ratings and Electrical Characteristics

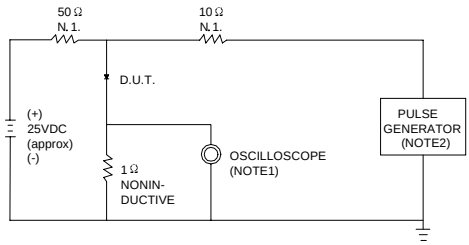
T_A = 25°C unless otherwise specified

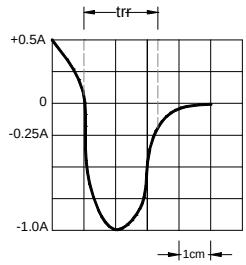
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	EU01Z	EU01	EU01A	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 forw ard rectified current 9.5mm lead length @T_A=75℃	$I_{F(AV)}$	0.25			A
Peak forw ard surge current 10ms single half-sine-w ave superimplsed on rated load @T_J=125℃	I_{FSM}	15.0			A
Maximum instantaneous forw ard voltage @ 0.25A	V_F	2.5			V
Maximum reverse current @T_A=25℃ at Rated DC blocking voltage @T_A=100℃	I_R	10.0 150.0			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			℃/W
Operating junction temperature range	T_J	- 55 ----- + 150			℃
Storage temperature range	T_{STG}	- 55 ----- + 150			℃

Note: 1. Measured with I_F=0.5A, I_R=1A, I_{rr}=0.25A.
2. Measured at 1.0MHz and applied reverse of 4.0V DC.
3. Themal resistance from junction to ambient.

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

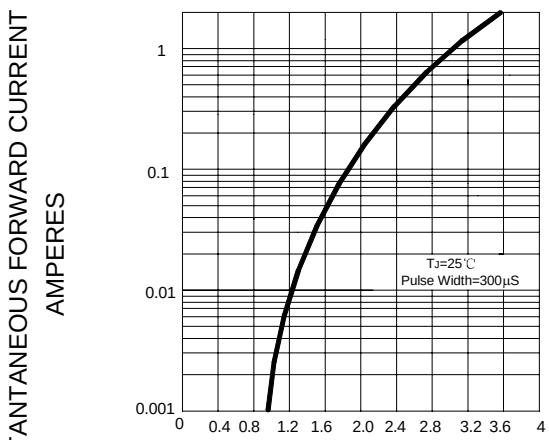


FIG.3 – FORWARD DERATING CURVE

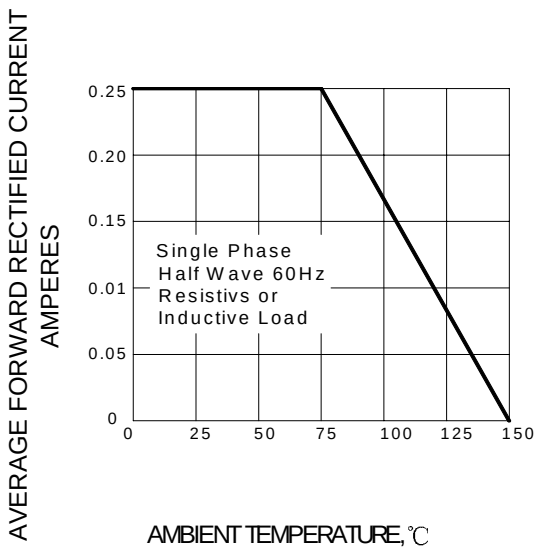


FIG.4 – PEAK FORWARD SURGE CURRENT

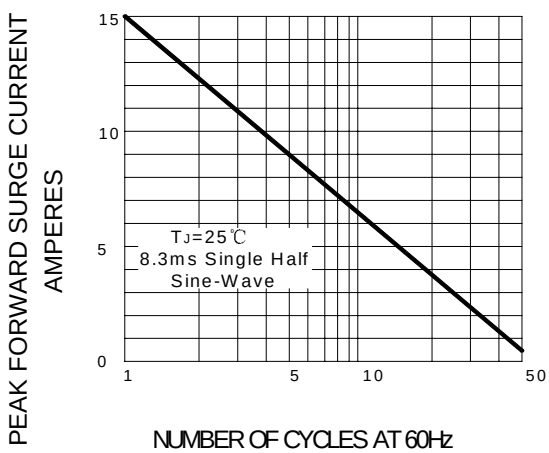


FIG.5 –TYPICAL JUNCTION CAPACITANCE