



HIGH EFFICIENCY RECTIFIER

EU2YX(Z)---EU2A(Z)

VOLTAGE RANGE: 100 --- 600 V

CURRENT: 1.0---1.2 A

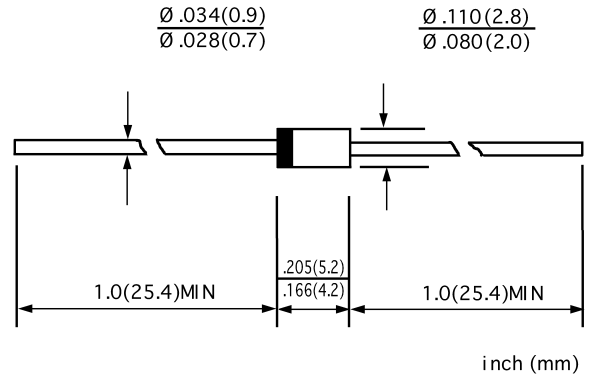
FEATURES

- ◇ Low cost
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with Alcohol, Isopropanol and similar solvents
- ◇ The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

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

DO - 41



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

		EU2YX	EU2Z	EU2	EU2A	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	100	200	400	600	V
Maximum RMS voltage	V_{RMS}	70	140	210	420	V
Maximum DC blocking voltage	V_{DC}	100	200	400	600	V
Maximum average forward rectified current 9.5mm lead length, @ $T_A=75^\circ C$	$I_{F(AV)}$	1.2	1.0			A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_J=125^\circ C$	I_{FSM}	25.0	15.0			A
Maximum instantaneous forward voltage @ $I_F=I_{F(AV)}$	V_F	0.90	1.40			V
Maximum reverse current @ $T_A=25^\circ C$ at rated DC blocking voltage @ $T_A=100^\circ C$	I_R		10.0	300.0		μA
Maximum reverse recovery time (Note1)	t_{rr}	50	100			ns
Typical junction capacitance (Note2)	C_J	20		15		pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	60				$^\circ C/W$
Operating junction temperature range	T_J	- 55 ----- + 150				$^\circ C$
Storage temperature range	T_{STG}	- 55 ----- + 150				$^\circ C$

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

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

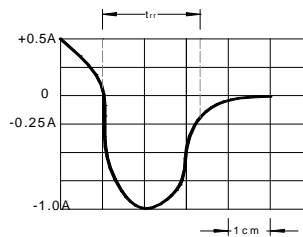
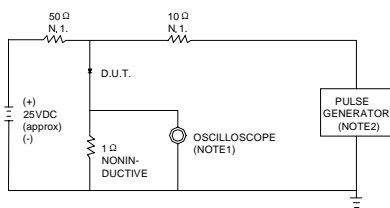
3. Thermal resistance junction to ambient.

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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

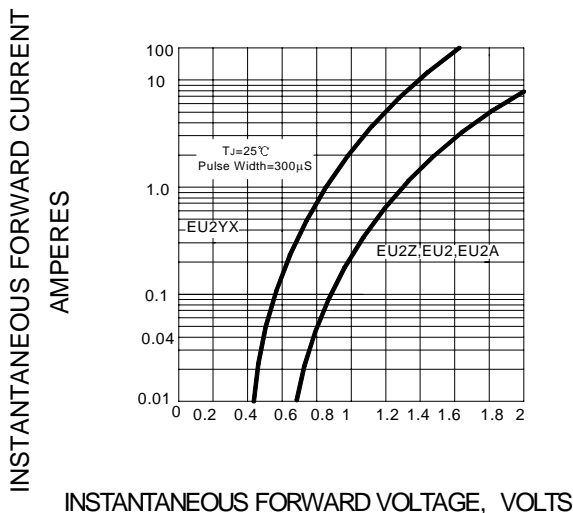


FIG.3 – FORWARD DERATING CURVE

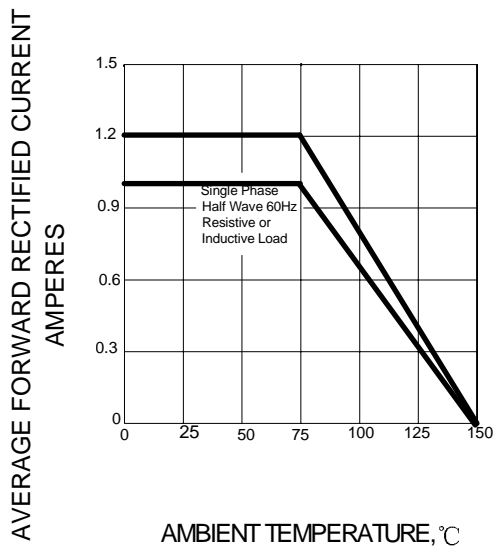


FIG.4 – PEAK FORWARD SURGE CURRENT

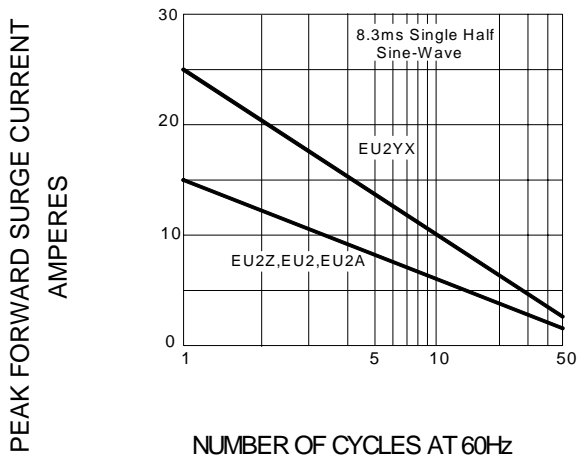


FIG.5 – TYPICAL JUNCTION CAPACITANCE

