HIGH EFFICIENCY RECTIFIER

VOLTAGE RANGE: 200--- 600 V
CURRENT: 0.25A

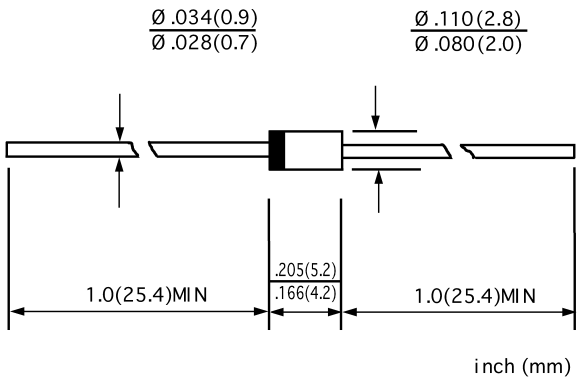
FEATURES

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

MECHANICAL DATA

- ◇ Case: JEDEC 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

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MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

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

		EU01Z	EU01	EU01A	UNITS
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℃	I_R	10.0			μA
at Rated DC blocking voltage @T_A=100℃		150.0			
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			℃

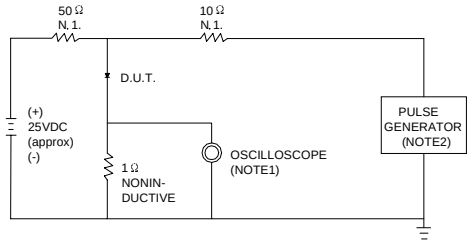
Note: 1. Measured with I_F=0.5A, I_R=1A, I_{rr}=0.25A.

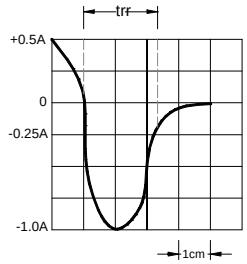
2. Measured at 1.0MHz and applied reverse of 4.0V DC.

3. Themal resistance from junction to ambient.

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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

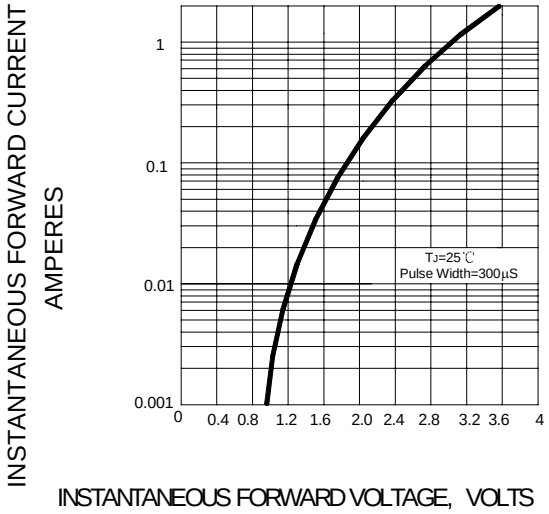


FIG.3 – FORWARD DERATING CURVE

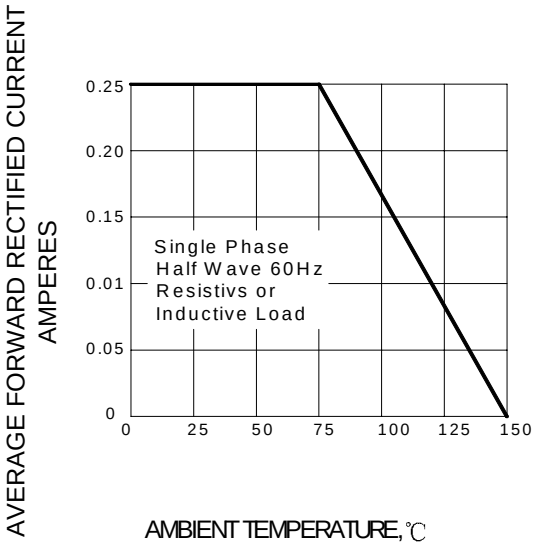


FIG.4 – PEAK FORWARD SURGE CURRENT

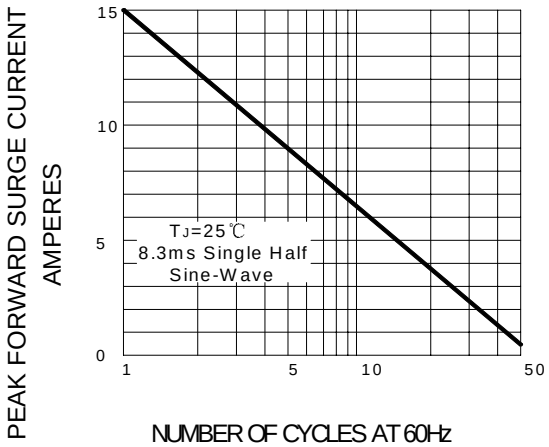


FIG.5 –TYPICAL JUNCTION CAPACITANCE

