

HIGH EFFICIENCY RECTIFIERS

VOLTAGE RANGE: 400 --- 600 V
CURRENT: 3.5 A

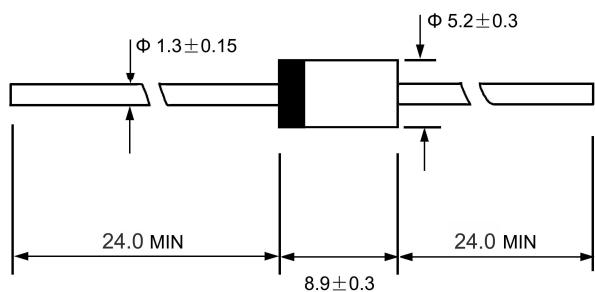
FEATURES

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

MECHANICAL DATA

- ◇ Case: JEDEC DO-27, molded plastic
- ◇ Terminals: Axial leads, solderable per MIL-STD-202, Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.041ounces, 1.15 grams
- ◇ Mounting: Any

DO - 27



Dimensions in millimeters

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%.

		RU4M	RU4AM	UNITS	
Maximum peak repetitive reverse voltage	V_{RRM}	400	600	V	
Maximum RMS voltage	V_{RMS}	280	420	V	
Maximum DC blocking voltage	V_{DC}	400	600	V	
Maximum average forward rectified current 9.5mm lead length, $@T_A=75^\circ C$	$I_{F(AV)}$	3.5			A
Peak forward surge current 10ms single half-sine-wave superimposed on rated load $@T_J=125^\circ C$	I_{FSM}	70.0			A
Maximum instantaneous forward voltage $@ 3.5A$	V_F	1.3			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}	100			ns
Typical junction capacitance (Note2)	C_J	70	50	pF	
Typical thermal resistance (Note3)	$R_{\theta JL}$	8			$^\circ C/W$
Operating junction temperature range	T_J	- 55 ----- + 150			$^\circ C$
Storage temperature range	T_{STG}	- 55 ----- + 150			$^\circ C$

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

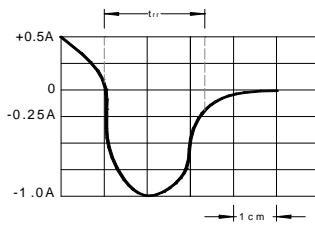
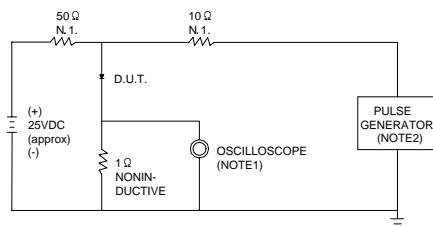
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal resistance junction to ambient.

RATINGS AND CHARACTERISTIC CURVES

RU4M(Z)—RU4AM(Z)

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

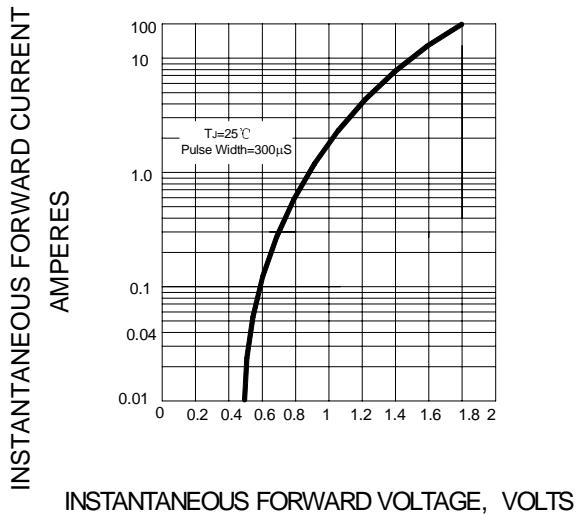


FIG.3 – FORWARD DERATING CURVE

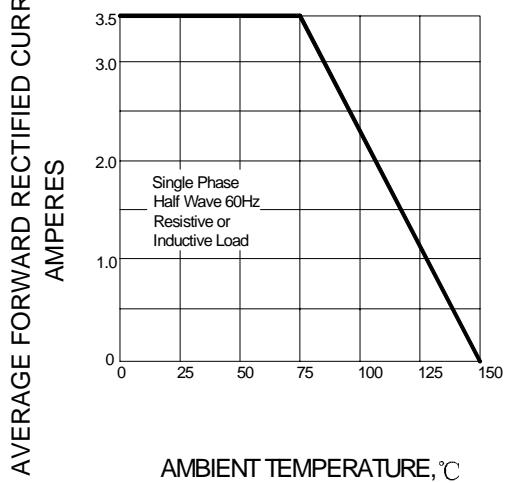


FIG.4 – PEAK FORWARD SURGE CURRENT

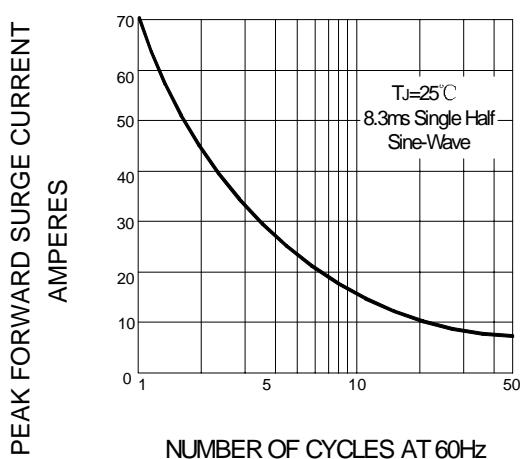


FIG.5 – TYPICAL JUNCTION CAPACITANCE

