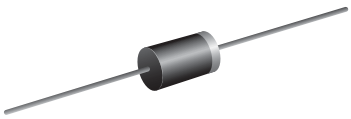
RU4D - RU4DS

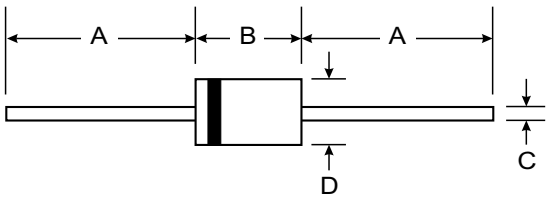
HIGH EFFICIENCY RECTIFIER DIODES

VOLTAGE RANGE: 1300V
CURRENT: 1.5-2.5 A

Features

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





DO-201AD		
Dim	**Min**	**Max**
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

Mechanical Data

- Case: DO-201AD, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

RoHS COMPLIANT

Maximum Ratings and Electrical Characteristics

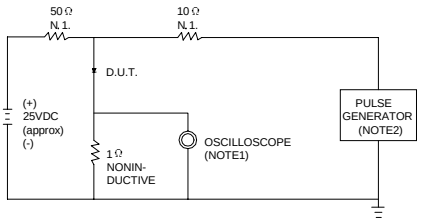
T_A = 25°C unless otherwise specified

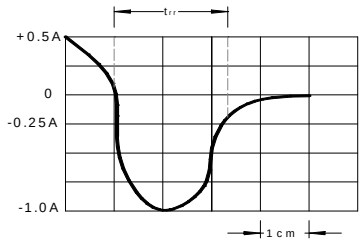
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	RU4D	RU4DS	UNITS
Maximum peak repetitive reverse voltage	V_{RRM}	1300		V
Maximum RMS voltage	V_{RMS}	910		V
Maximum DC blocking voltage	V_{DC}	1300		V
Maximum average forw ard rectified current 9.5mm lead length, @T_A=75℃	$I_{F(AV)}$	1.5	2.5	A
Peak forw ard surge current 10ms single half-sine-w ave superimplsed on rated load @T_J=125℃	I_{FSM}	50.0		A
Maximum instantaneous forw ard voltage @ I_F=$I_{F(AV)}$	V_F	1.8		V
Maximum reverse current @T_A=25℃	I_R	50.0		μA
at rated DC blocking voltage @T_A=100℃		500.0		
Maximum reverse recovery time (Note1)	t_{rr}	100.0		ns
Typical junction capacitance (Note2)	C_J	50		pF
Typical thermal resistance (Note3)	$R_{\theta JL}$	8		℃/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, Irr=0.25A.
2. Measured at 1.0MH_Z and applied reverse voltage of 4.0V DC.
3. Thermal resistance junction to lead.

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

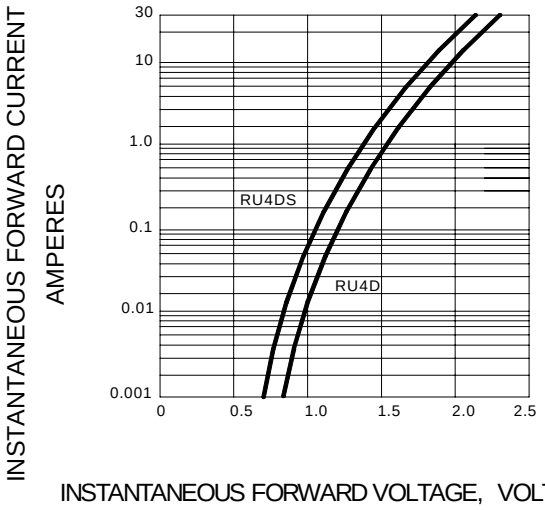


FIG.3 -- FORWARD DERATING CURVE

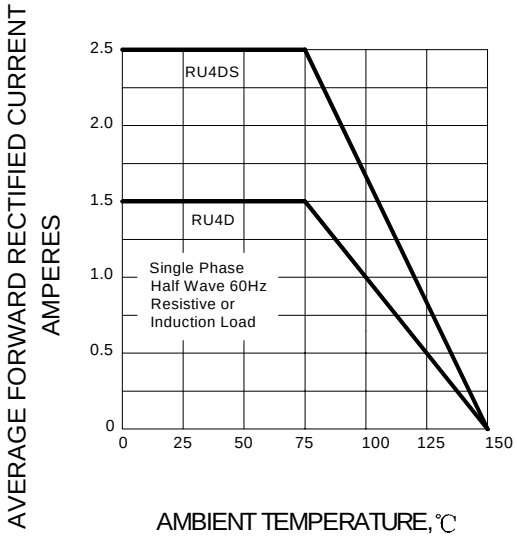


FIG.4 -- PEAK FORWARD SURGE CURRENT

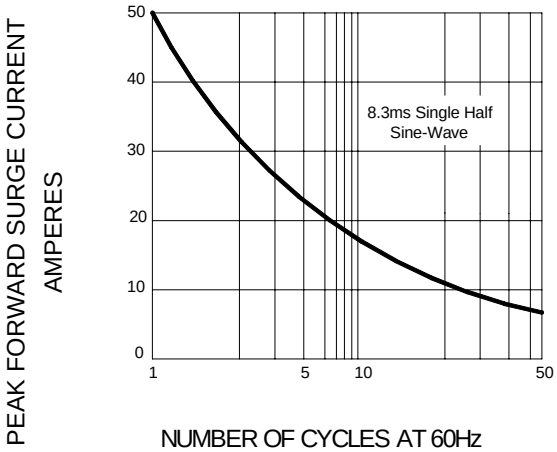


FIG.5--TYPICAL JUNCTION CAPACITANCE