

VOLTAGE RANGE: 200 - 600V

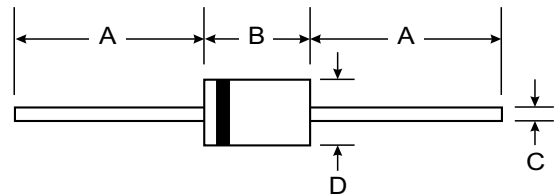
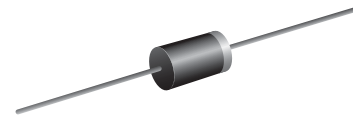
CURRENT: 2.0 - 3.5 A

Features

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

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



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		

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	RU30Z	RU30	RU30A	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)}	3.5	2.0		A
Peak forw ard surge current 8.3ms single half-sine-wave superimposed on rated load @T _J =125℃	I _{FSM}	80.0	200.0		A
Maximum instantaneous forw ard voltage @ I _F =I _{F(AV)}	V _F	0.97	0.95		V
Maximum reverse current @T _A =25℃ at rated DC blocking voltage @T _A =100℃	I _R	10.0 300.0			μ A
Maximum reverse recovery time (Note1)	t _{rr}	100			ns
Typical junction capacitance (Note2)	C _J	70		50	pF
Typical thermal resistance (Note3)	R _{θJL}	10			℃/W
Operating junction temperature range	T _J	- 55 ----- + 150			℃
Storage temperature range	T _{STG}	- 55 ----- + 150			℃

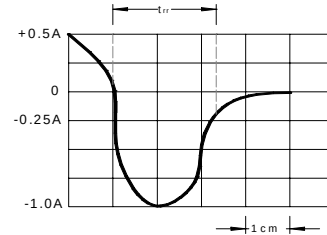
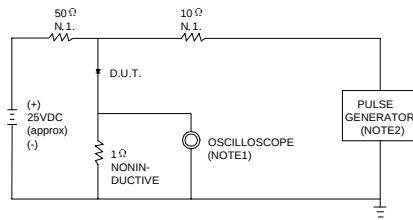
NOTE: 1. Measured with $I_F=0.5A$, $I_R=1A$, $I_{rr}=0.25A$

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

3. Thermal resistance from junction to ambient

Ratings AND Characteristic Curves RU30Z-RU30A

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

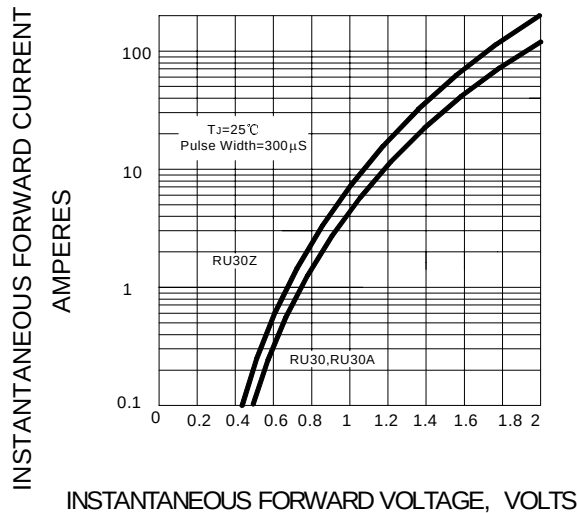


FIG.3 – FORWARD DERATING CURVE

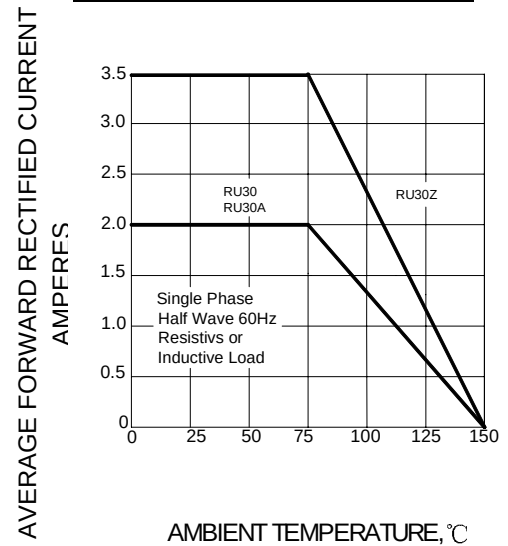


FIG.4 – PEAK FORWARD SURGE CURRENT

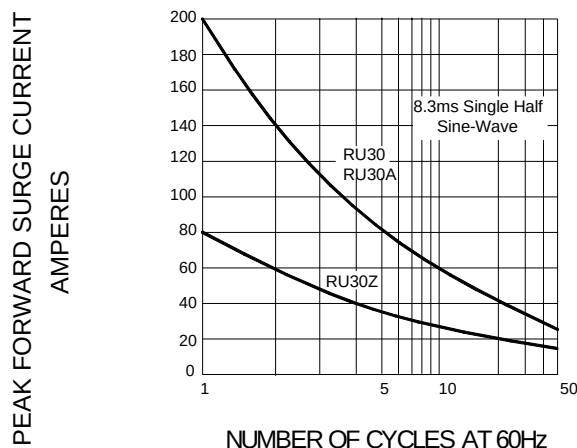


FIG.5 – TYPICAL JUNCTION CAPACITANCE

