

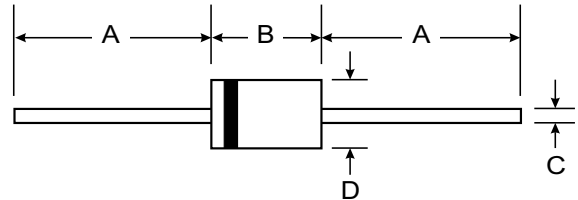
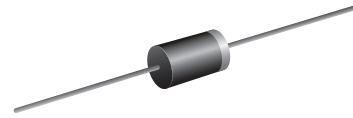
VOLTAGE RANGE: 100 - 1000V
CURRENT: 2.0-1.5A

Features

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

Mechanical Data

- Case : DO-15 Molded plastic
- Epoxy : UL94V-0 rate flame retardant
- Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight : 0.465 gram



DO-15		
Dim	Min	Max
A	25.40	—
B	5.50	7.62
C	0.686	0.889
D	2.60	3.60
All Dimensions in mm		



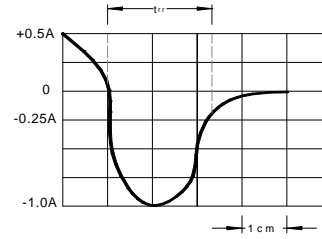
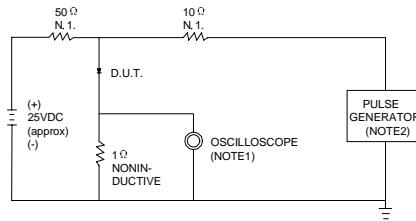
Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

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

Characteristic	Symbol	RU3YX	RU3	RU3A	RU3B	RU3C	Unit
Maximum peak repetitive reverse voltage	V _{RRM}	100	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	70	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	100	400	600	800	1000	V
Maximum average forward rectified current 9.5mm lead length, @T _A =75°C	I _{F(AV)}	2.0	1.5		1.1	1.5	A
Peak forward surge current 10ms single half-sine-wave superimposed on rated load @T _J =125°C	I _{FSM}	50.0	20.0				A
Maximum instantaneous forward voltage @ I _F =I _{F(AV)}	V _F	0.95	1.5			2.5	V
Maximum reverse current @T _A =25°C at rated DC blocking voltage @T _A =100°C	I _R	10.0					μA
		300.0	400.0				
Maximum reverse recovery time (Note1)	t _{rr}	50	100				ns
Typical junction capacitance (Note2)	C _J	50		30			pF
Typical thermal resistance (Note3)	R _{θJL}	12					°C/W
Operating junction temperature range	T _J	- 55 ----- + 150					°C
Storage temperature range	T _{STG}	- 55 ----- + 150					°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.

FIG.1 – TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES: 1. RISE TIME = 7ns MAX INPUT IMPEDANCE = $1M\Omega$, 22pF.
 2. RISE TIME = 10ns MAX SOURCE IMPEDANCE = 50Ω .

SET TIME BASE FOR 10/20 ns/cm

FIG.2 – TYPICAL FORWARD CHARACTERISTIC

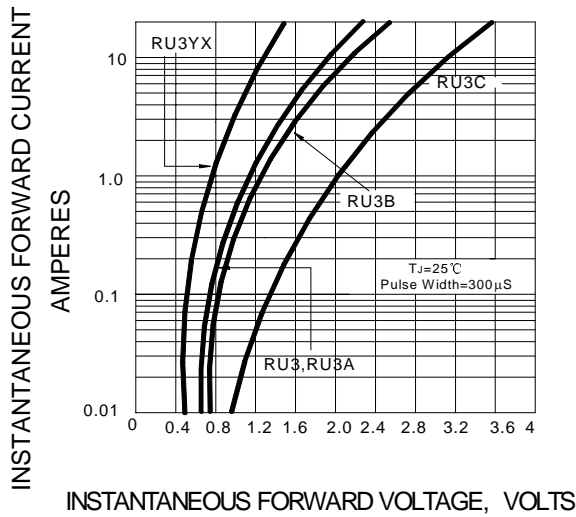


FIG.3 – FORWARD DERATING CURVE

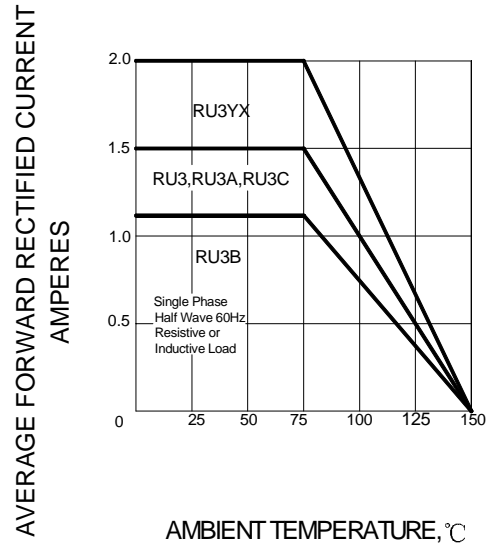


FIG.4 – PEAK FORWARD SURGE CURRENT

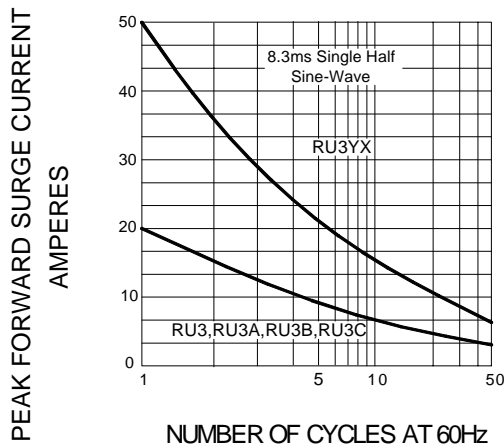


FIG.5 – TYPICAL JUNCTION CAPACITANCE

