

VOLTAGE RANGE: 200 - 800V

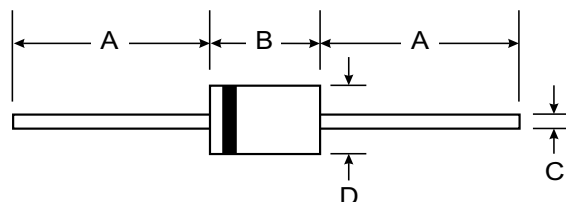
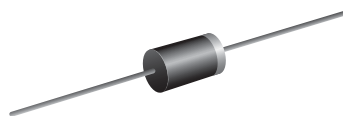
CURRENT: 2.0 A

Features

- Low cost
- Diffused junction
- Glass passivated chips
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon, Alcohol, Isopropanol and similar solvents

Mechanical Data

- Case : DO-15 Molded plastic
- Epoxy : UL94V-O 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 $T_A = 25^\circ\text{C}$ unless otherwise specified

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

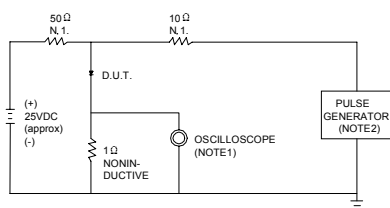
Characteristic	Symbol	1N5059	1N5060	1N5061	1N5062	Unit
Maximum recurrent peak reverse voltage	V_{RRM}	200	400	600	800	V
Maximum RMS voltage	V_{RMS}	140	280	420	560	V
Maximum DC blocking voltage	V_{DC}	200	400	600	800	V
Maximum average forward rectified current 9.5mm lead length, @ $T_A = 50^\circ\text{C}$	$I_{F(AV)}$	2.0				A
Peak forward surge current 10ms single half-sine-wave superimposed on rated load @ $T_J = 125^\circ\text{C}$	I_{FSM}	50.0				A
Maximum instantaneous forward voltage @ 1.0A @ 2.5A	V_F	1.0 1.15				V
Maximum reverse current @ $T_A = 25^\circ\text{C}$ at rated DC blocking voltage @ $T_A = 150^\circ\text{C}$	I_R	1.0 100				μA
Maximum reverse recovery time (Note1)	t_{rr}	4.0				μs
Typical junction capacitance (Note2)	C_J	40				pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	45				K/W
Operating junction temperature range	T_J	- 55 ----- + 175				$^\circ\text{C}$
Storage temperature range	T_{STG}	- 55 ----- + 175				$^\circ\text{C}$

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

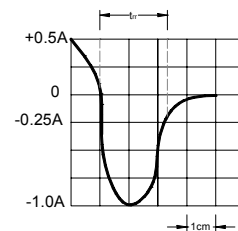
2. Measured at 1.0MHz and applied reverse voltage of 0V DC.

3. Thermal resistance from junction to ambient.

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 2.0 μs/cm

FIG.2 – TYPICAL FORWARD CHARACTERISTIC

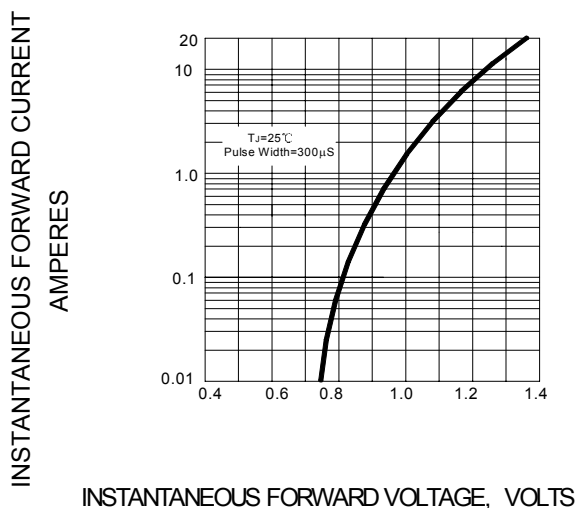


FIG.3 – FORWARD DERATING CURVE

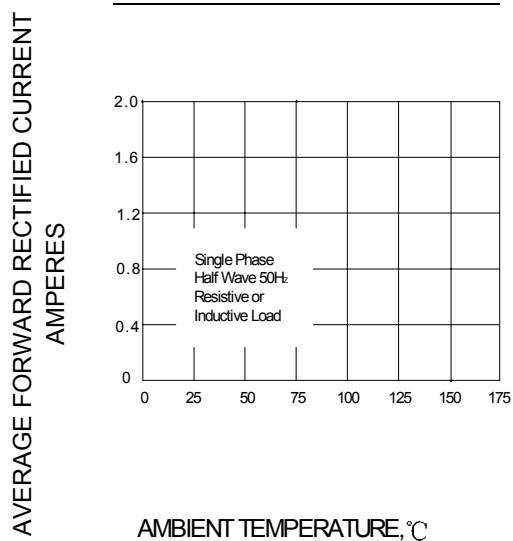


FIG.4 -- PEAK FORWARD SURGE CURRENT

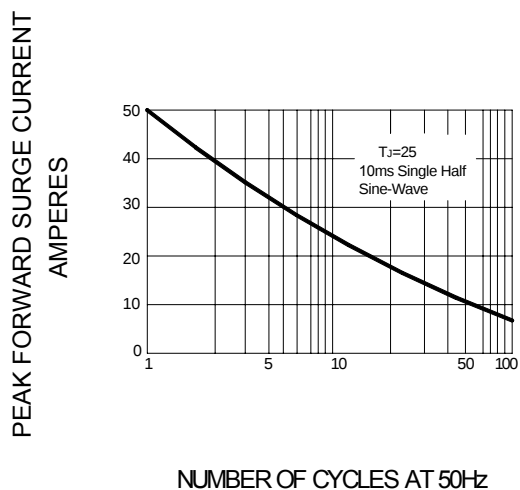


FIG.5--TYPICAL JUNCTION CAPACITANCE

