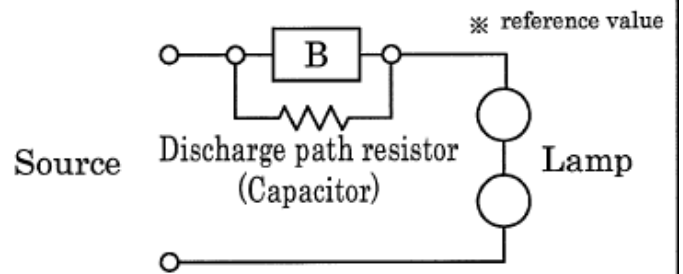
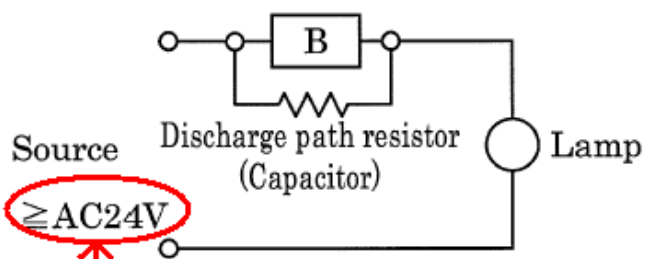


1. Lamp Wattage	.....	3 W
2. Lamp Current	.....	$0.300 \pm 0.030$ A
3. Lamp Voltage	.....	10.5 V
4. Tube Length (L)	.....	$63 \pm 3$ mm
5. Tube Diameter (D)	.....	$20 \pm 1$ mm
6. Base	.....	E17
7. Spectral Peak	.....	253.7 nm
8. UV output	.....	0.16 W
9. UV micro-watts	.....	$1.7 \mu\text{W}/\text{cm}^2$ (at 1m) *
10. Average Life	.....	3,000 hrs
11. Ballast	.....	Ballast or Capacitor
12. Glow Starter	.....	No need
13. Circuit	(Capacitor is for AC operation.)	B : Ballast or Capacitor



Discharge resistor 0.5 W 2.5 MΩ

AC24V note indicates a minimum. Same min. for DC.  
Discharge resistor & capacitor would have to be determined

TITLE **Germicidal Lamp**  
**GTL3**

The key point with using this is that you must have 0.3 amps plus or minus 10% running through the lamp. The 2.5megaohm 1/2W resistor listed above is probably for use with line voltage. For 120V 60Hz line voltage, it appears from the table below that the capacitor would be a 7 microfarad.

It is a simple circuit with DC; see "DC Operation" drawing below. No capacitor. But you will need some electrical engineering help to determine the resistor ohm and watt values on your DC voltage.

24VAC or VDC is the minimum. We could not help calculate the resistor or capacitor value for less-than-line voltage.

Below are:

--Some further advice from the engineers in answer to earlier questions.

--A chart showing the required capacitor value in uF when used on AC at various line voltages.

--A simple drawing showing that the lamp can be used on DC

1. Is the attached drawing for AC circuit? YES

a. What is the capacitor specification? PLEASE SEE ATTACHED.

b. We believe 10.5V is on the lamp only. YES, 10.5V IS THE "LAMP VOLTAGE".

c. If two lamps are in series as in one of the diagrams, 10.5V should be on each lamp? Confirm. YES.

(NOTE: WHAT IS NECESSARY TO KEEP THE LIGHT ON IS FIRST TO SECURE THE LAMP CURRENT OF 0.300A PLUS/MINUS 0.030A AS SPECIFIED IN THE LAMP SPEC SHEET. EACH LAMP IN SERIES IS, THEREFORE, REQUIRED TO BE GIVEN 0.300 PLUS/MINUS 0.030A. THE LAMP VOLTAGE OF 10.5V RESULTS IF THE ABOVE LAMP CURRENT REQUIREMENT IS SATISFIED. )

2. Can this lamp run on DC circuit? YES, THIS LAMP RUNS ON DC, TOO.

A SIMPLE DC CIRCUIT DIAGRAM IS SHOWN (BELOW CAPACITOR CHART)  
THE LAMP CURRENT OF 0.300 PLUS/MINUS 0.030A IS REQUIRED HERE,  
TOO. VOLT AND RESISTANCE ARE NEEDED TO BE SET SO 0.300 PLUS/  
MINUS 0.030A MAY ENTER THE LAMP.

1<sup>ST</sup> Column | 2<sup>nd</sup> & 3<sup>rd</sup> column | 4<sup>th</sup> column

LINE VOLTAGE | CAPACITOR uF @ various volts & Hz | CAPACITOR VOLT MAX RATING

(5<sup>th</sup> column is advice that 2 lamps are possible at higher volts)

**GTL3 Capacitor Selection data**

Unit :  $\mu F$

Power Source		CAPACITOR RATED VOLTAGE	Two lamps possible?	
Voltage	Frequency			
		50 Hz	60 Hz	
100 V	9	150V	NO	
105 V				8
110 V				
115 V	8	7		
120 V	7			
200 V	4.5	4		
210 V		3.5		
220 V	4		250V	OK
230 V				
240 V		3		

DC operation

