



OPTOELECTRONICS

SOLID STATE LAMP
BULLETIN 3-3103

LAMP TYPE—SSL-65, INFRARED SOLID STATE

APPLICATION—GARMENT TAG READER, TAPE READER, PHOTOELECTRIC SYSTEMS

DESCRIPTION

The General Electric SSL-65 solid state lamp is designed to produce non-coherent infrared radiation at 25° C. The SSL-65 design is especially well suited for printed circuit board applications requiring small center-to-center spacing such as paper tape and retail merchandise price tag readers. It is constructed of glass, ceramic and metal.

Absolute Maximum Ratings

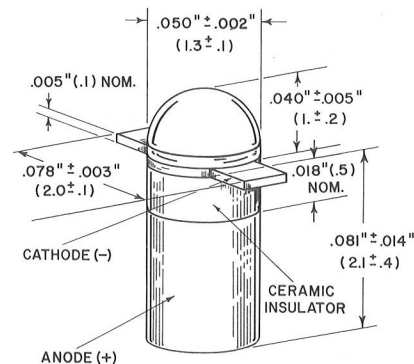
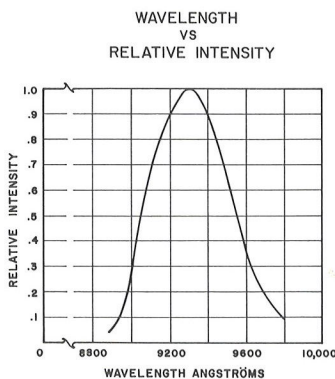
Power Dissipation— T_C (Case Temperature) = 25°C**	100* milliwatts
* Derate 1.0mW/°C above 25°C ambient	
Forward Current (I_F) Continuous	75 milliamperes
Forward Current (I_F) Pulsed	400 milliamperes
Reverse Voltage (V_R) @ 10 μ A	2 volts DC
Junction Temperature	—65 to 125°C
Soldering Temperature	240°C for 3 minutes

** Lamp rating for typical solder mounting in standard 1/16" thick double-clad printed circuit board.

Characteristics

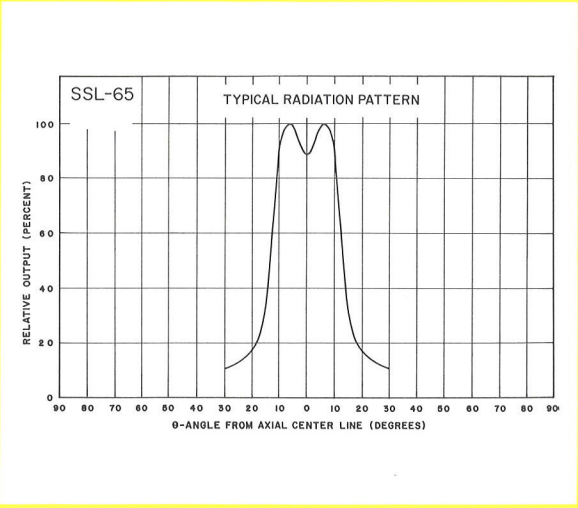
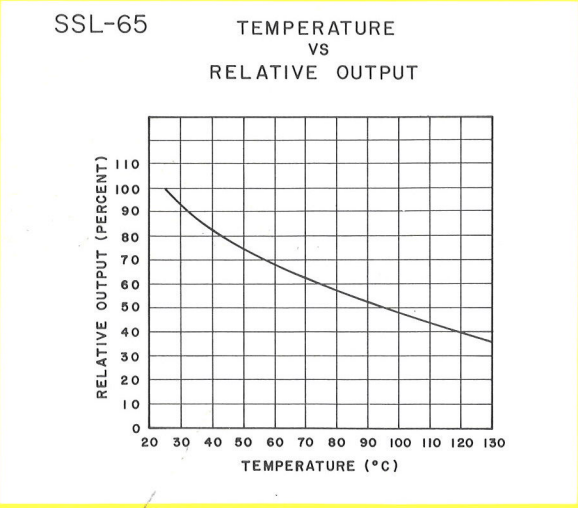
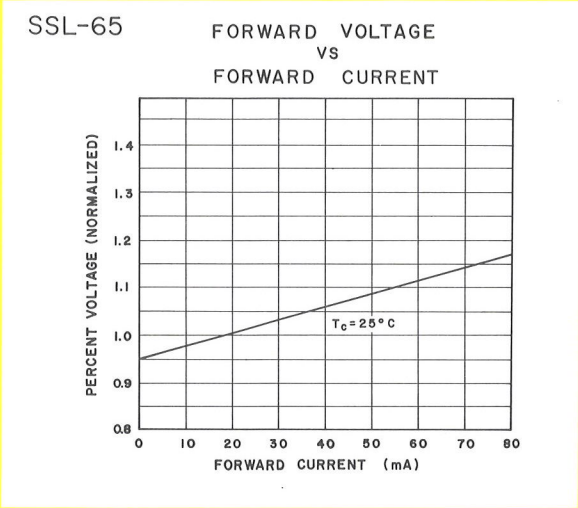
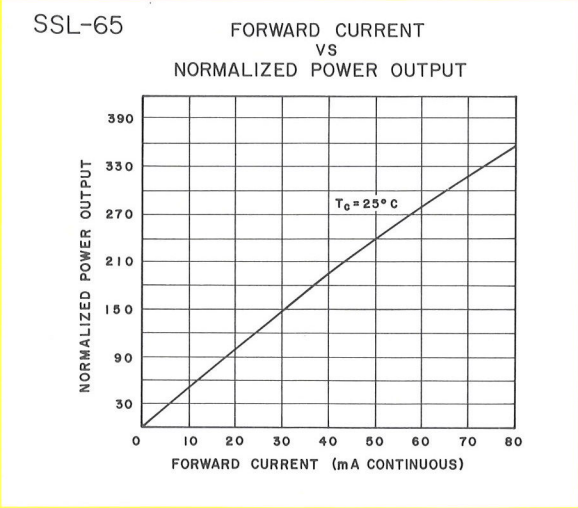
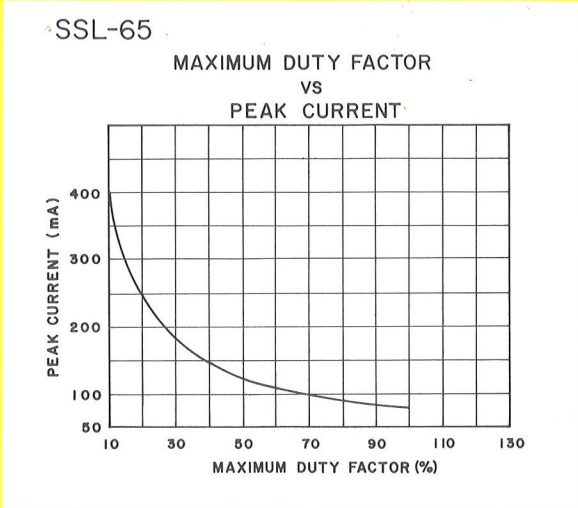
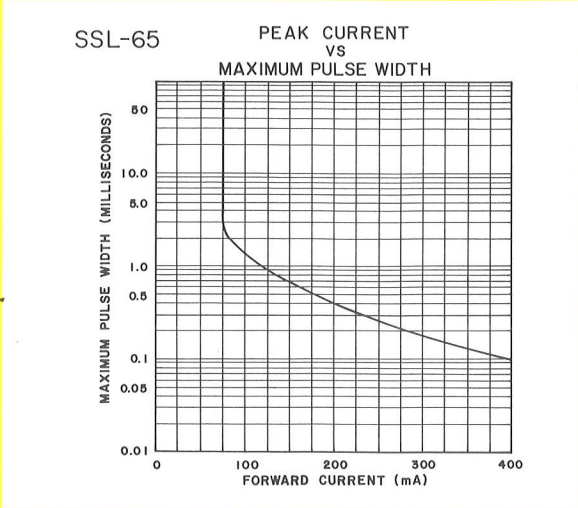
	Minimum	Typical	Maximum	Units
V_F (Forward Voltage)	1.0	1.2	1.5	volts
P_O (Radiant Power Output) @ 20mA	0.15	0.3	—	milliwatts
BVR (Reverse Breakdown Voltage) @ IR = 10 μ A	2.0	15.0	—	volts
ρ (Peak Spectral Emission) $I_F = 20$ mA	—	930	—	nanometers
bw (Optical Bandwidth)	—	40	—	nanometers
t_r (rise time)	—	0.5	—	microseconds
t_f (fall time)	—	0.5	—	microseconds

This bulletin contains data which are correct as of May 1, 1973. GE reserves the right to make changes at any time in order to improve design and to supply the best product possible. When any equipment is involved, please communicate with your GE Miniature Lamp Representative, for latest design information.



See other side for Typical Characteristics Curves.

TYPICAL CHARACTERISTICS



FOR INFORMATION ON COMPLETE LINE OF GE SSL'S, WRITE FOR BULLETIN #3-1240



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