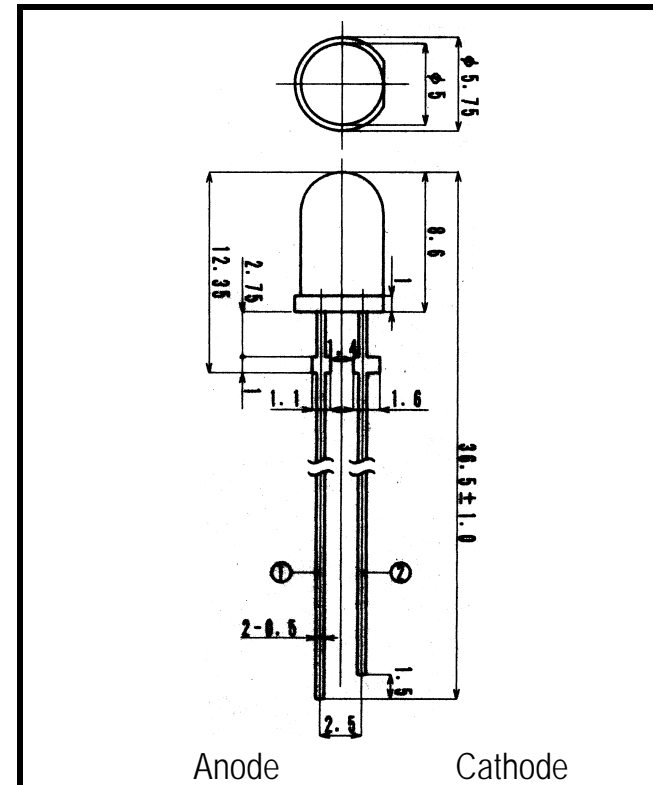


VSF665S1-J

Visible Light Emitting Diode



Anode Cathode
Dimensions (Unit:mm)

- FEATURES**
- High Power Output
 - Narrow Beam Angle
 - High Reliability
 - Stand-off Type
- APPLICATIONS**
- Optical Sensor
 - Indicators

2. ELECTRICAL & OPTICAL CHARACTERISTICS (Ta=25 °C)

ITEM	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=20mA	5.0	6.5		mW
Luminous Intensity	Iv	IF=20mA	600	1200		mcd
Forward Voltage	VF	IF=20mA		1.8	2.2	V
Reverse Current	IR	VR=5V			100	μA
Peak Wavelength	λp	IF=20mA		660		nm
Spectral Line Half Width		IF=20mA		25		nm
Half Intensity Beam Angle		IF=20mA		±12		deg.
Rise Time	Tr	IFP=20mA		30		nS
Fall Time	Tf	IFP=20mA		30		nS
Junction Capacitance	Cj	1MHz, V=0V		20		nS
Temp. Coefficient of Iv	Iv/T	IF=10mA		-0.5		%/°C
Temp. Coefficient of VF	Vf/T	IF=10mA		-1.5		mV/°C

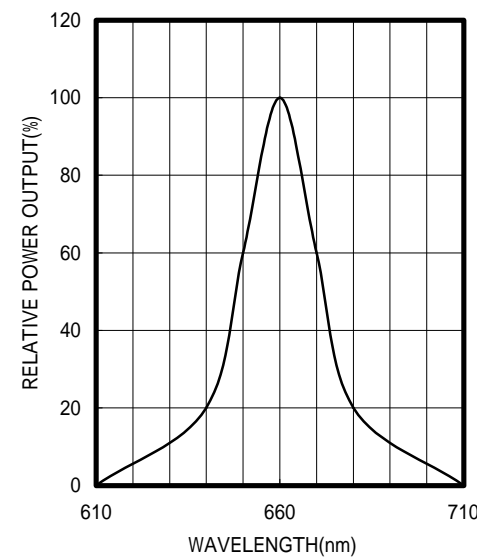
1. ABSOLUTE MAXIMUM RATINGS (Ta=25 °C)

ITEM	SYMBOL	RATINGS	UNIT
Forward Current (DC)	IF	50	mA
Forward Current (Pulse)*1	IFP	0.5	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	120	mW
Operating Temp.	Topr	-20 TO 80	
Storage Temp.	Tstg	-30 TO 100	
Junction Temp.	Tj	100	
Lead Soldering Temp.*2	Tls	260	

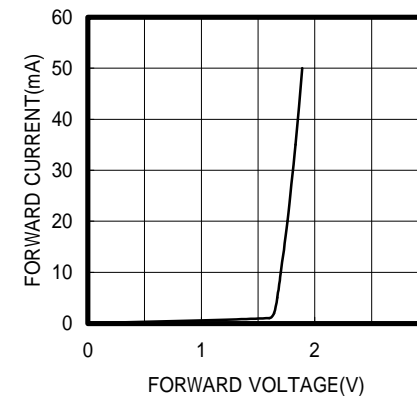
*1: Tw=10μs, T=10mS

*2: Time 3 Sec max, Position: Up to 2mm from the body

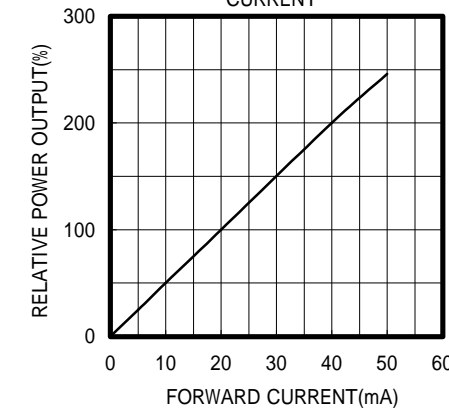
SPECTRAL OUTPUT



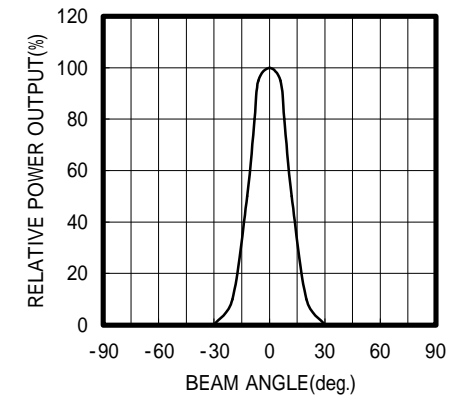
FORWARD I-V CHARACTERISTICS



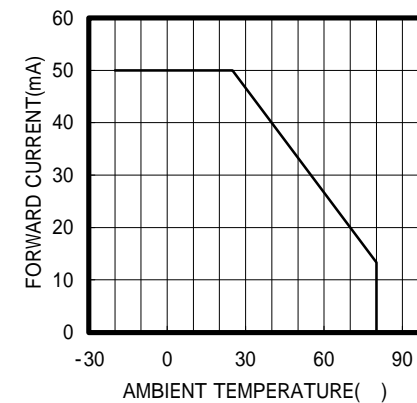
RELATIVE POWER vs FORWARD CURRENT



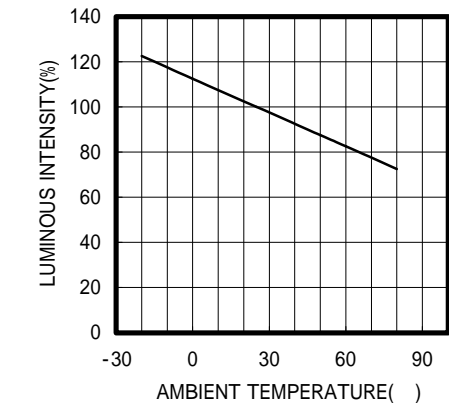
RADIATION PATTERN



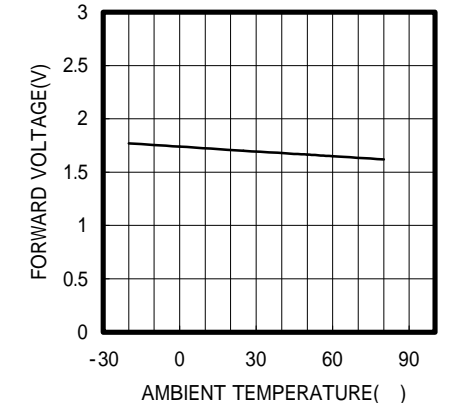
THERMAL DERATING CURVE



LUMINOUS INTENSITY vs TEMPERATURE
IF=10mA



FORWARD VOLTAGE vs TEMPERATURE
IF=10mA



OPTRANS

2-6-11 MASUKATA, TAMA-KU, KAWASAKI 214-0032, JAPAN
TEL.81(44)932-6491 / FAX.81(44)932-8281
E-mail optrans@mb.kcom.ne.jp