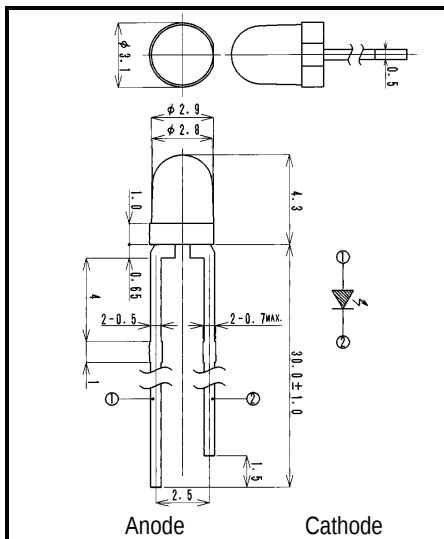


VSF741C1

Visible Light Emitting Diode



FEATURES

- High-output Power
- Compact
- High Reliability

APPLICATIONS

- Optical Switches
- Optical Sensors
- Medical Application

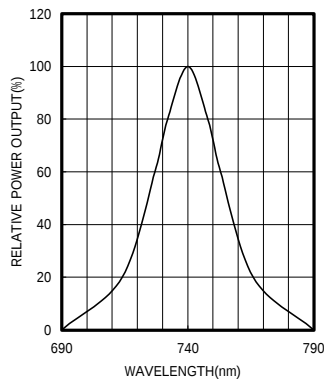
1. ABSOLUTE MAXIMUM RATINGS (Ta=25 °C)

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 85	
Storage Temp.	Tstg	-30 TO 100	
Junction Temp.	Tj	100	
Lead Soldering Temp.*2	Tls	260	

*1:Tw=10uS,T=10mS

*2:Time 5 Sec max,Position:Up to 3mm from the body

SPECTRAL OUTPUT



To purchase this part contact
Marktech Optoelectronics at

800.984.5337

Marktech
Optoelectronics

www.marktechopto.com



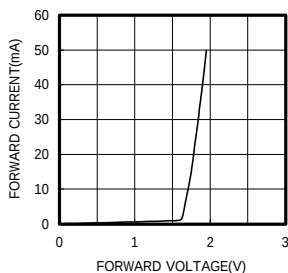
VSF741C1

Visible Light Emitting Diode

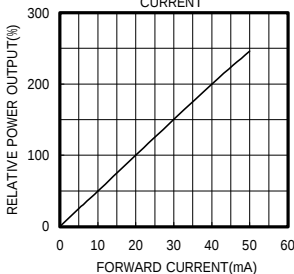
2.ELECTRICAL & OPTICAL CHARACTERISTICS (Ta=25)

I T E M	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=20mA		4.5		mW
Forward Voltage	VF	IF=20mA		1.8	2.3	V
Reverse Current	IR	VR=5V			100	μ A
Peak Wavelength	λ_p	IF=20mA		740		nm
Spectral Line Half Width	$\Delta \lambda$	IF=20mA		30		nm
Half Intensity Beam Angle	θ	IF=20mA		± 25		deg.
Rise Time	Tr	IFP=20mA		-		nS
Fall Time	Tf	IFP=20mA		-		nS
Junction Capacitance	Cj	1MHz , V=0V		35		pF
Temp. Coefficient of PO	P/T	IF=10mA		-0.6		%/
Temp. Coefficient of VF	V/T	IF=10mA		-1.9		mV/

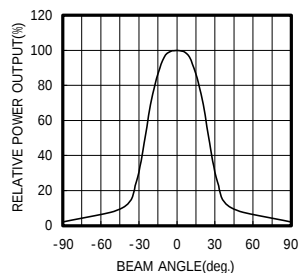
FORWARD I-V CHARACTERISTICS



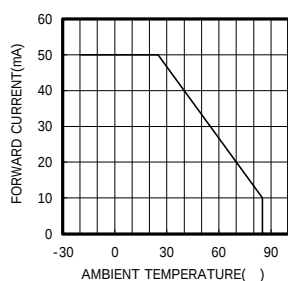
RELATIVE POWER vs FORWARD CURRENT



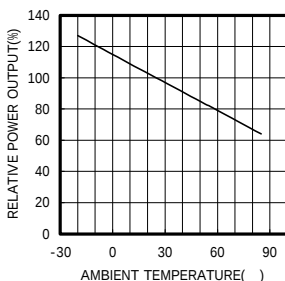
RADIATION PATTERN



THERMAL DERATING CURVE



POWER OUTPUT vs TEMPERATURE
IF=10mA



FORWARD VOLTAGE vs TEMPERATURE
IF=10mA

