



Peak Emission Wavelength: 650nm

The VSF678D3 is a red 3mm water clear emitter designed for applications requiring high brightness and high reliability in a wider angle package with straight leads.

FEATURES

- > High Reliability / High Power Output
- > Excellent Optical / Mechanical Axis Alignment
- > Wide Beam Angle
- > Emitting Window Diameter Φ 170 μ m

APPLICATIONS

- > Optical Sensing
- > Machine Vision
- > Bar Code Scanning / Edge Sensing
- > Fiber Optical Communications



Absolute Maximum Ratings (Ta=25°C)

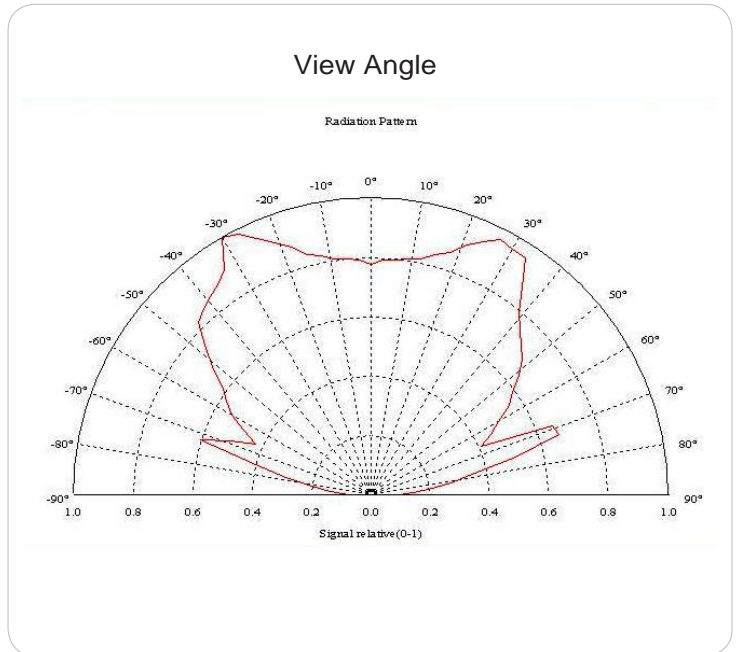
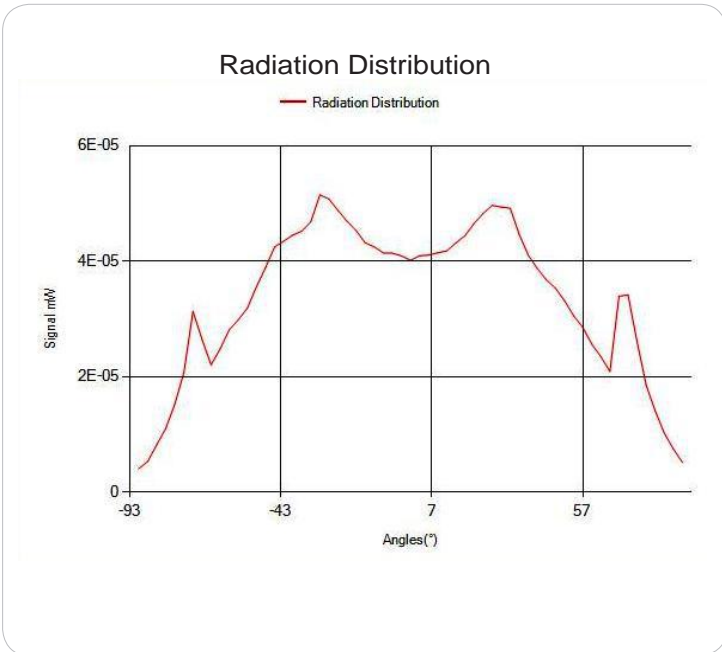
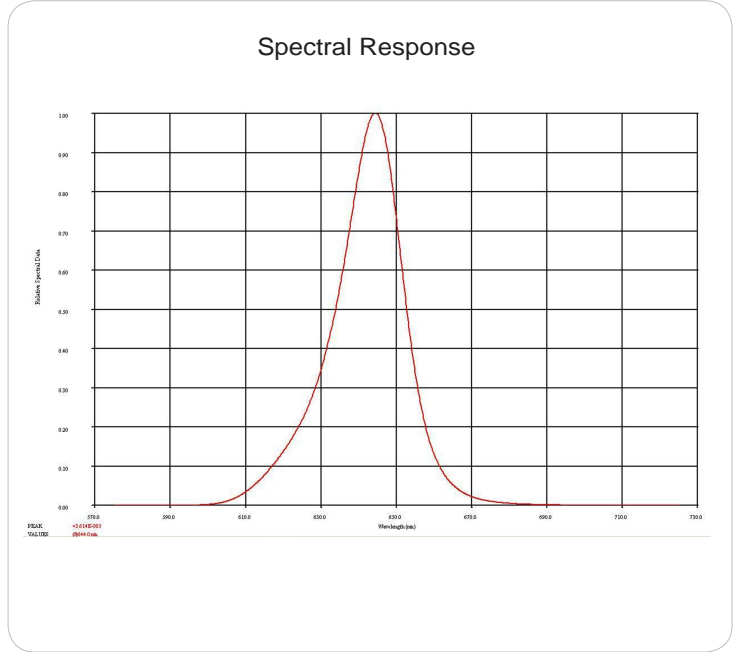
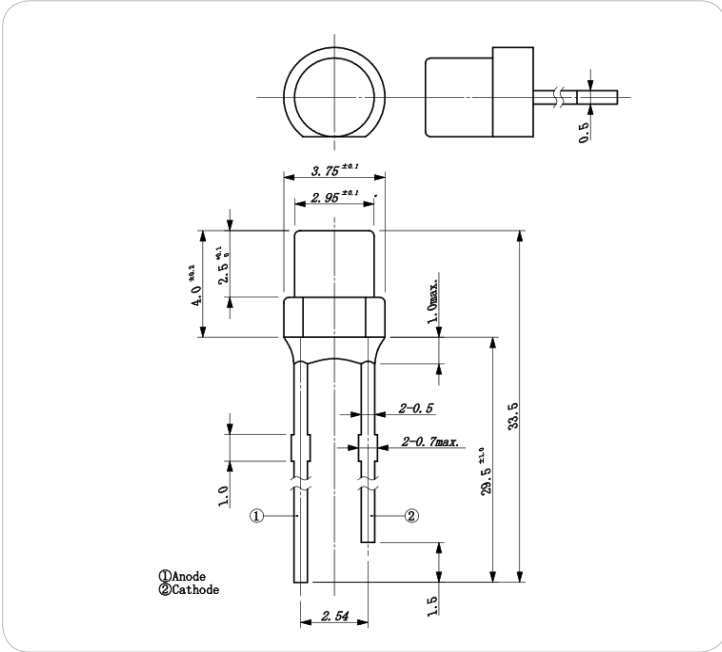


ITEMS	SYMBOL	RATINGS	UNIT
Forward Current (DC)	IF	80	mA
Reverse Voltage	VR	3	V
Operating Temperature Range	Topr	-40 ~ +85	°C
Storage Temperature Range	Tstg	-40 ~ +100	°C

*1: Tw=10 μ sec, T=10msec. *2: Time 5 Sec max, Position: Up to 3mm from the body.

Electrical & Optical Characteristics (Ta = 25°C)

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Power Output	PO	IF=20mA	--	6.5	--	mW
Forward Voltage	VF	IF=20mA	--	1.93	--	V
Reverse Current	IR	VR=5V	--	--	100	μ A
Peak Emission Wavelength	λ_p	IF=20mA	--	650	--	nm
Spectral Line Half Width	$\Delta\lambda$	IF=20mA	--	19	--	nm
Half Intensity Beam Angle	Θ	IF=20mA	--	± 122	--	deg



Unit: mm, Tolerance: ±0.2