

SIR-320ST3F

Sensors

●Electrical and optical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Optical output	P _O	—	9	—	mW	I _F =5mA
Emitting strength	I _E	5.6	—	—	mW/sr	I _F =5mA
Forward voltage	V _F	—	1.2	1.5	V	I _F =5mA
Reverse current	I _R	—	—	10	μA	V _R =3V
Peak light emitting wavelength	λ _P	—	940	—	nm	I _F =5mA
Spectral line half width	Δλ	—	40	—	nm	I _F =5mA
Half-viewing angle	θ _{1/2}	—	±18	—	deg	I _F =5mA
Response time	tr·tf	—	1.0	—	μs	I _F =5mA
Cut-off frequency	f _c	—	1.0	—	MHz	I _F =5mA

●Electrical and optical characteristic curves

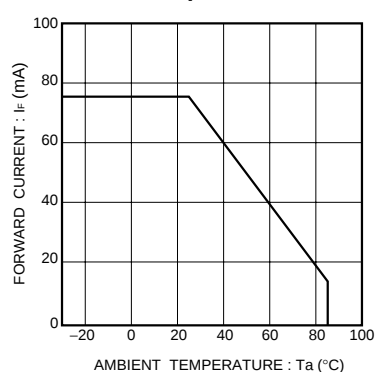


Fig.1 Forward current falloff

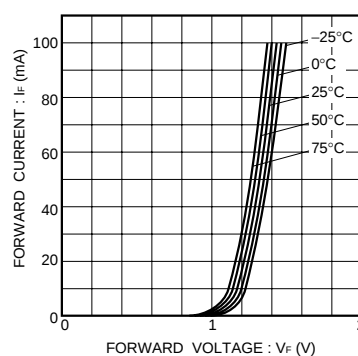


Fig.2 Forward current vs. forward voltage

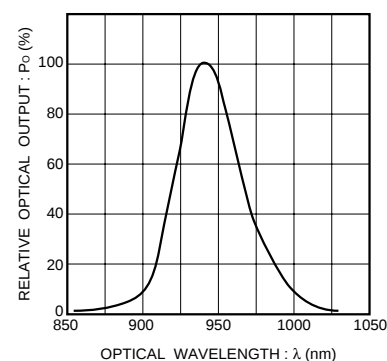


Fig.3 Wavelength

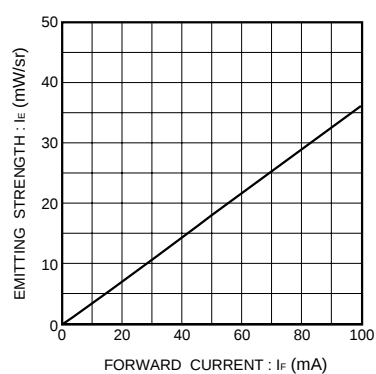


Fig.4 Emitting strength vs. forward current

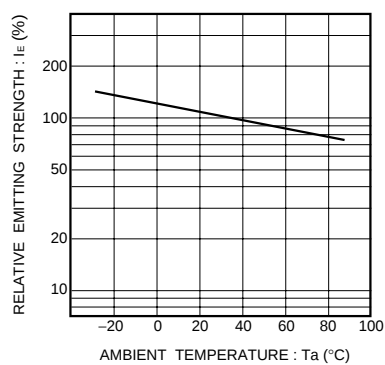


Fig.5 Radiant intensity vs. ambient temperature

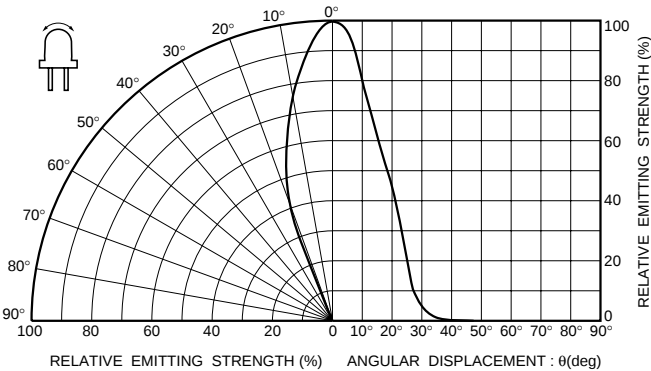


Fig.6 Directional pattern

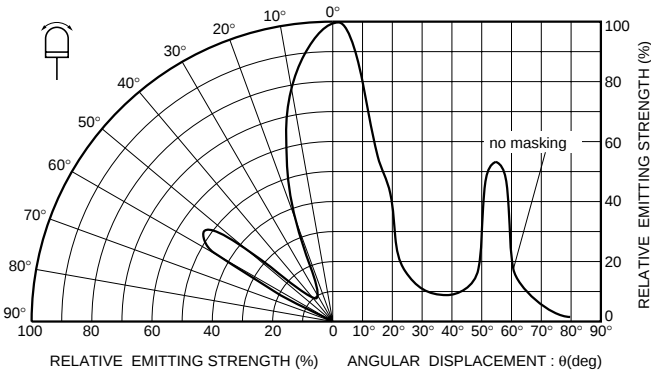


Fig.7 Directional pattern