



LED700-02AU

- Red LED
- 700 nm, 5.5 mW
- Chip: AlGaAs, 350 x 350 μm
- 5 mm Clear Molding, Epoxy Resin
- Viewing Angle: 16°



Description



LED700-02AU contains one AlGaAs LED chip die mounted on a lead frame hermetically sealed with a clear epoxy lens.

On forward bias, it emits a power radiation of typical **5.5 mW** at a peak wavelength at **700 nm**.

Maximum Ratings ($T_{\text{CASE}}=25^{\circ}\text{C}$)

Parameter	Symbol	Values		Unit
		Min.	Max.	
Power Dissipation	P_D		180	mW
Forward Current	I_F		75	mA
Pulse Forward Current *1	I_{FP}		200	mA
Reverse Voltage	V_F		5	V
Thermal Resistance	R_{THJA}		300	KW
Junction Temperature	T_J		120	$^{\circ}\text{C}$
Operating Temperature	T_{CASE}	- 40	+ 100	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	- 40	+ 100	$^{\circ}\text{C}$
Lead Solder Temperature *2	T_{SLD}		+ 265	$^{\circ}\text{C}$

*1 duty=1%, pulse width = 10 μs

*2 must be completed within 3 seconds

Electro-Optical Characteristics ($T_{\text{CASE}}=25^{\circ}\text{C}$)

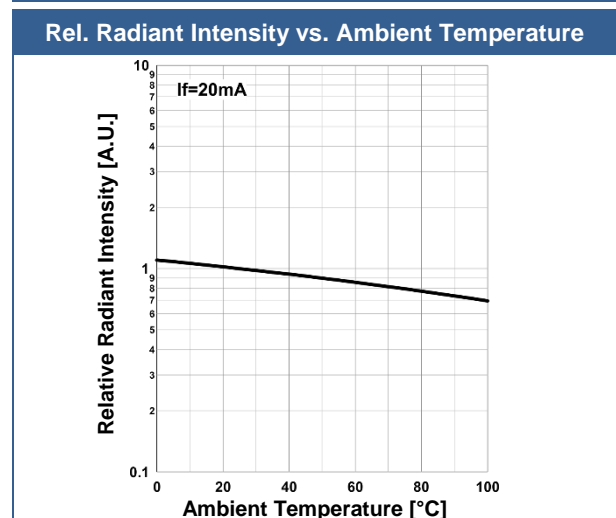
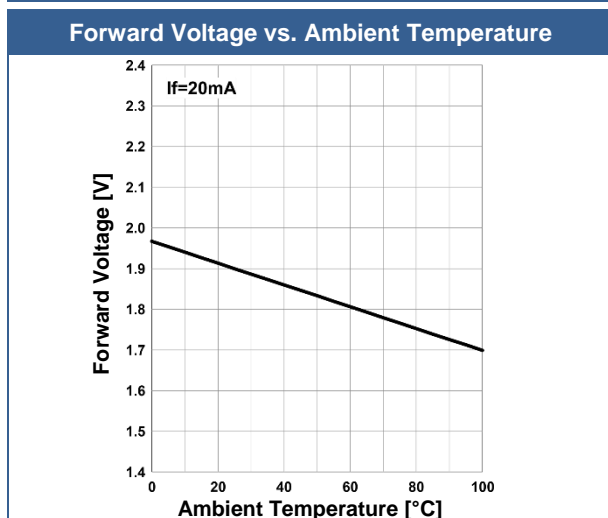
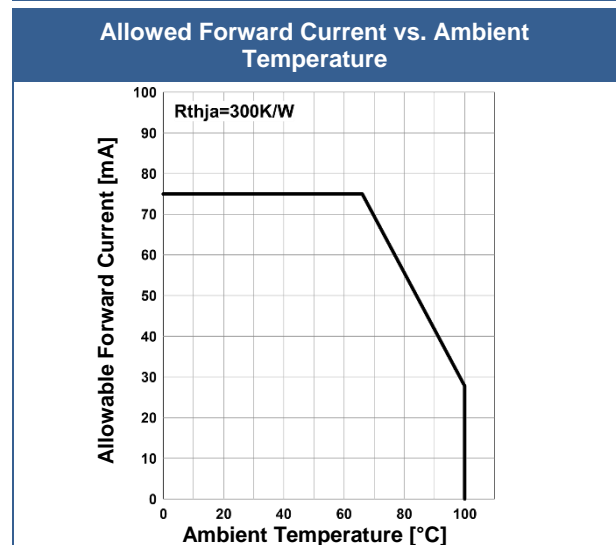
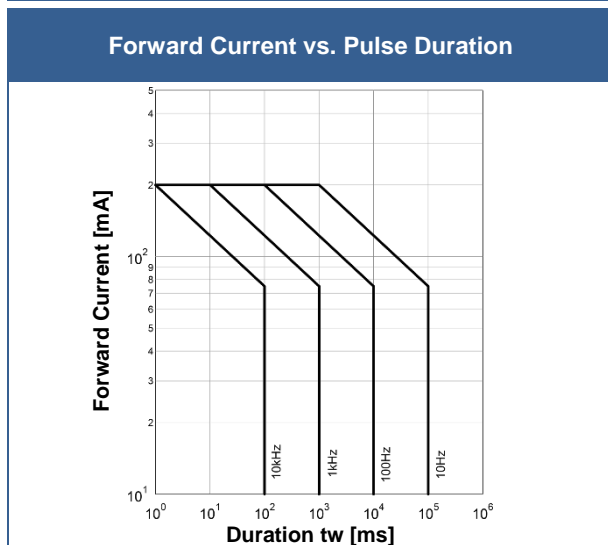
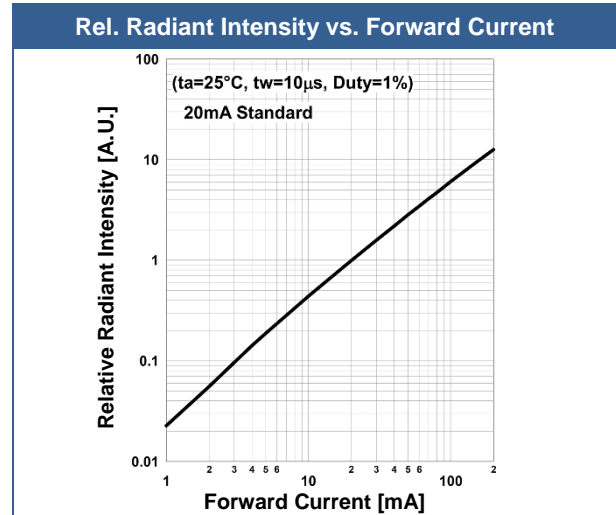
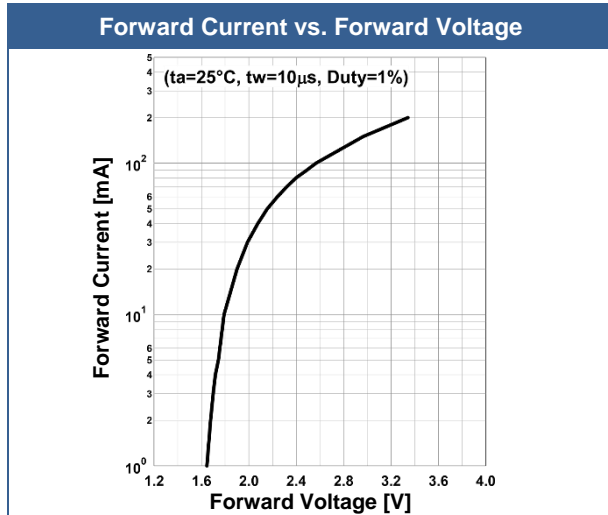
Parameter	Symbol	Conditions	Values			Unit
			Min.	Typ.	Max.	
Peak Wavelength	λ_P	$I_F=20\text{mA}$	690		710	nm
Half Width	$\Delta\lambda$	$I_F=20\text{mA}$		21		nm
Forward Voltage	V_F	$I_F=20\text{mA}$		1.9	2.3	V
	V_{FP}	$I_{FP}=200\text{mA}$		3.3		
Radiated Power *1	P_O	$I_F=20\text{mA}$		5.5		mW
		$I_{FP}=200\text{mA}$		69		
Radiant Intensity *2	I_E	$I_F=20\text{mA}$		54		mW/sr
		$I_{FP}=200\text{mA}$		680		
Viewing Angle	φ	$I_F=20\text{mA}$		16		deg.
Rise Time	t_R	$I_F=20\text{mA}$		10		ns
Fall Time	t_F	$I_F=20\text{mA}$		15		ns

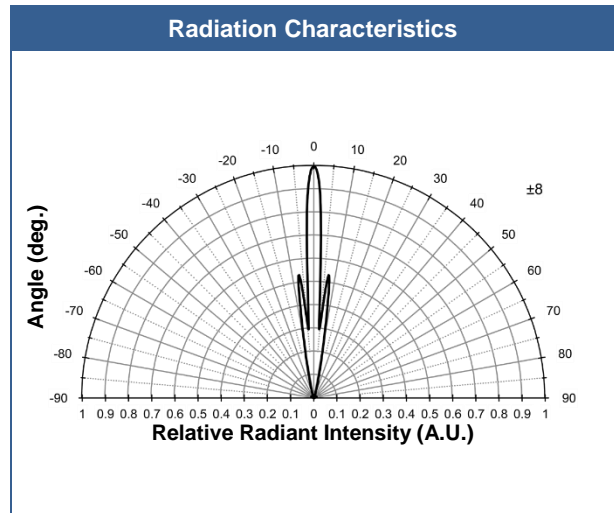
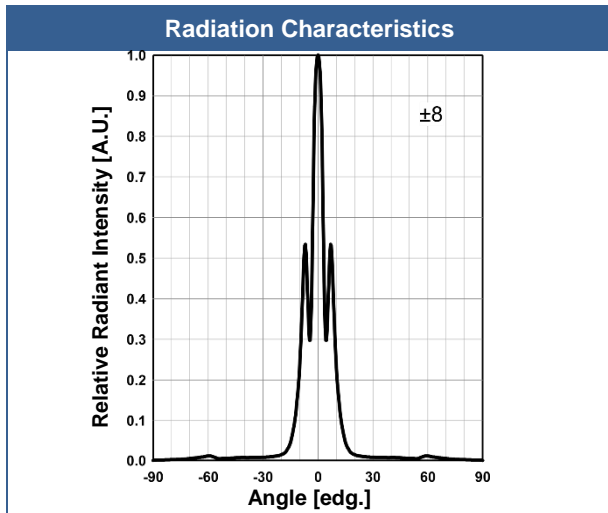
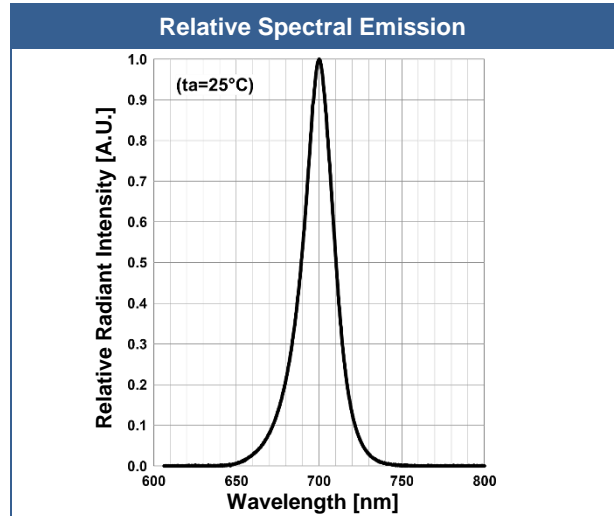
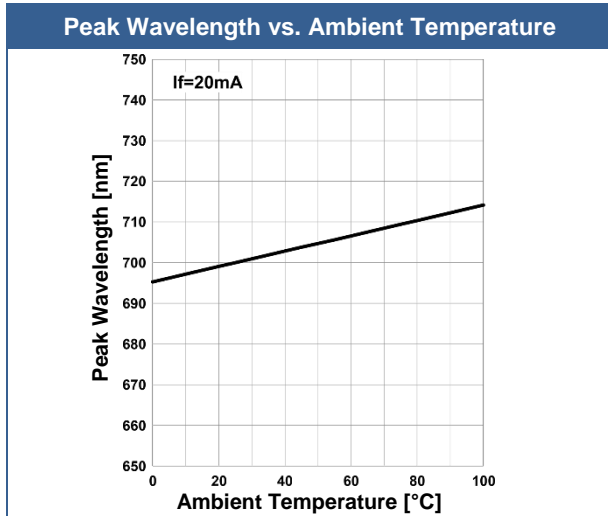
*1 measured by S3584-08

*2 measured by CIE127-2007 Condition B

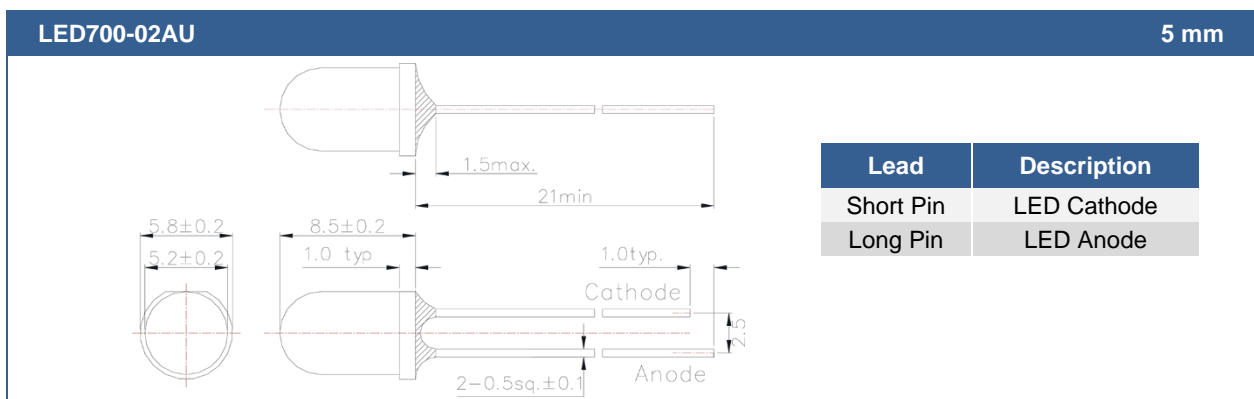


Typical Performance Curves





Outline Dimensions



All Dimensions in mm

