

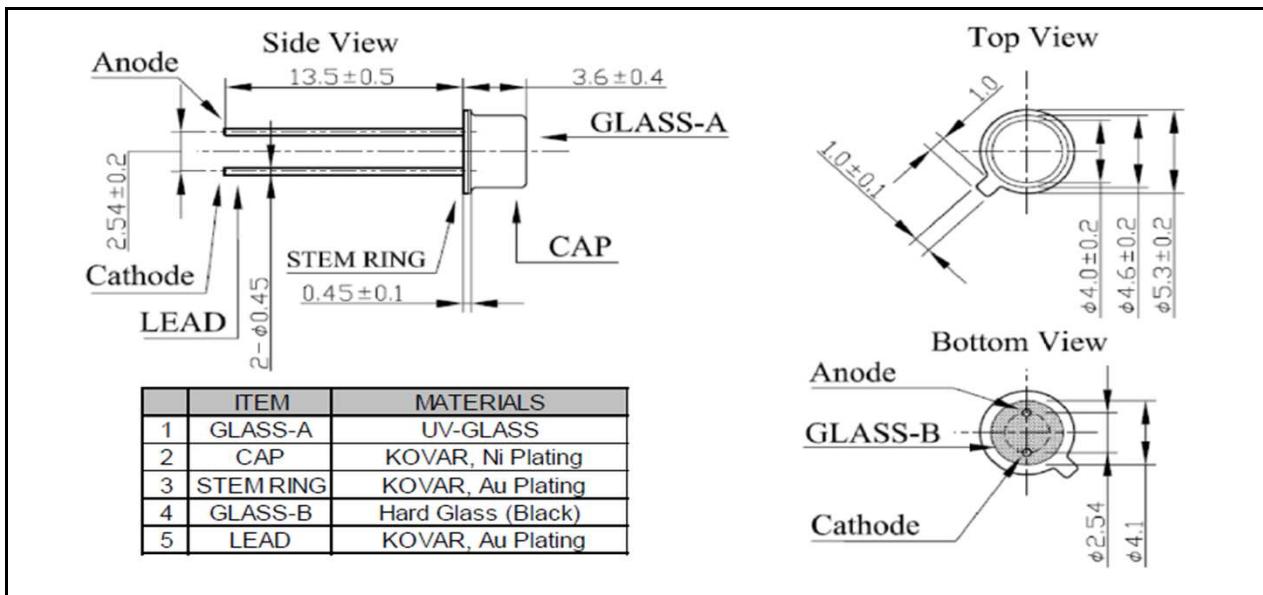

Data sheet

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UV LED**EOLD-310-093**

Rev. 01, 2016

Radiation	Type	Case
Ultraviolet (UVB)	AlGaN	metal TO-18 package with flat window


Maximum Ratings
T_{amb}= 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
Forward current		I _F	40	mA
Reverse voltage	I _R =10 µA	V _R	>10	V
Reverse current	V _R =5 V	I _R	<1	µA
Operating temperature range		T _{amb}	-30 to +80	°C
Storage temperature range		T _{stg}	-40 to +100	°C
Lead soldering temperature	< 3 s (manual); < 5 s (flow)	T _{sld}	350; 250	°C

Optical and Electrical Characteristics
T_{amb}= 25°C, unless otherwise specified

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V _F	I _F = 20 mA		6.5		V
Opt. output power	P _o	I _F = 20 mA		0.7		mW
Peak wavelength	λ _p	I _F = 20 mA	305	310	315	nm
Spectral bandwidth at 50%	Δλ _{0.5}	I _F = 20 mA		10		nm
Viewing angle	φ	I _F = 20 mA		±57		deg.
Rise and fall time*	t _r , t _f	I _{FP} = 200 mA		16; 8		ns

*Test conditions: frequency=100 kHz, duty=1%

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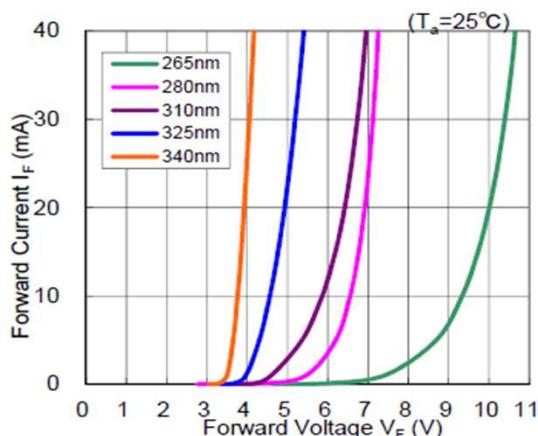
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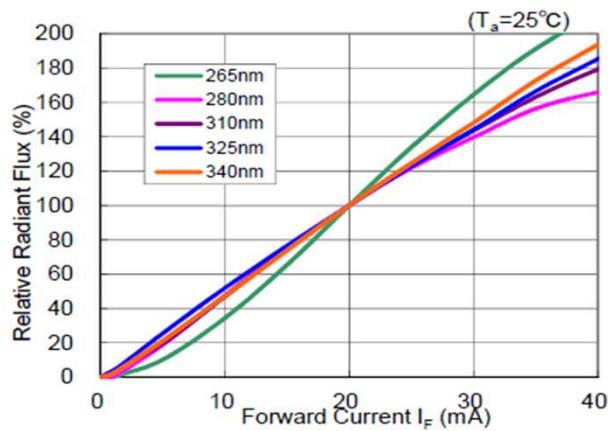
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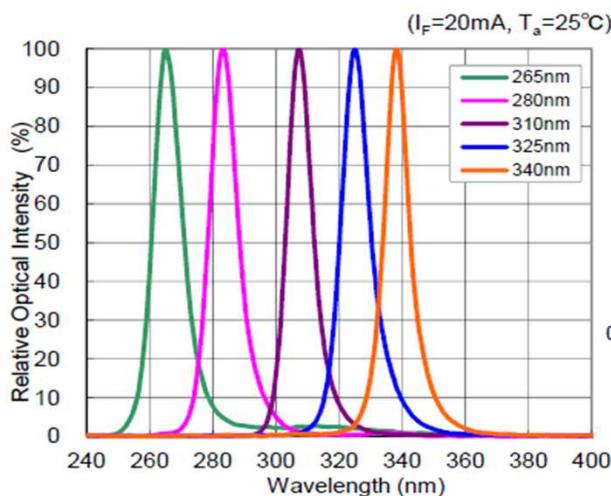
Forward Current vs Forward Voltage



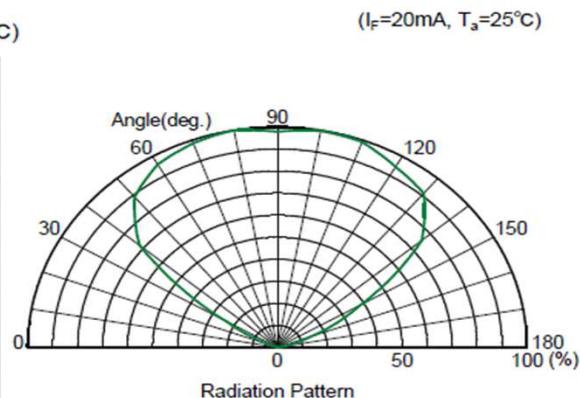
Forward Current vs Radiant Flux



Relative Intensity vs Peak Wavelength



Radiation Pattern



Data sheet

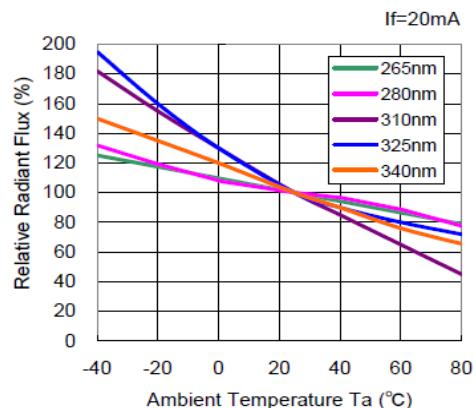
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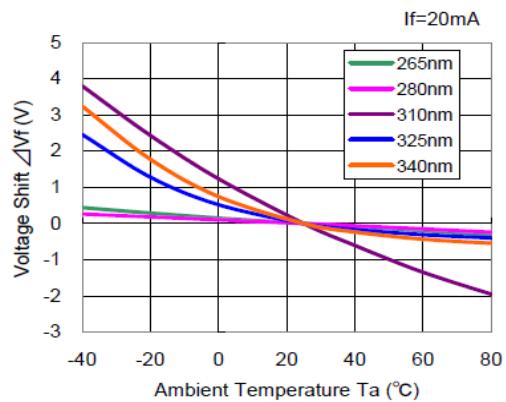
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Radiant Flux vs Ambient Temperature



Voltage Shift vs Ambient Temperature



Wavelength Shift vs Ambient Temperature

