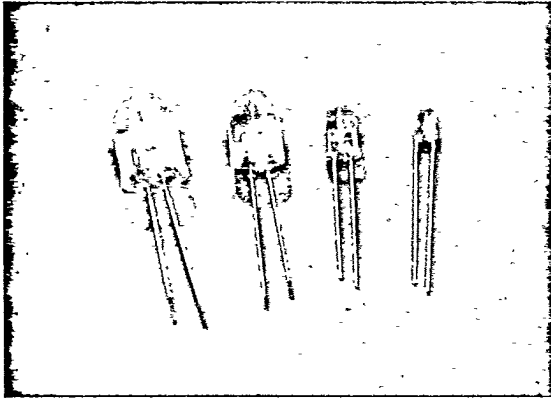




LED Lamps KILO BRIGHT

T-41-21



FEATURES

- Double hetero structure GaAlAs-red
- High brightness for outdoor applications
- Low drive current
- Solid state reliability, long life
- Excellent ON-OFF contrast ratio
- Fast response time, capable of pulse drive

1

AND185, 187, 190, and 191 Series - 8 mm / 10 mm Package Kilo Bright

Part Number	Color		Lens Description	Axial Luminous Intensity (mcd)		Test Condition (I _F -mA)	Viewing Angle 2θ _{1/2} (deg)
	Led	Lens		Min.	Typ.		
AND190CRP	Red	Clear	Clear	5600	13000	20	4
AND190BRP	Red	Clear	Clear	3200	7200	20	4
AND191CRP	Red	Milky	Diffused	320	720	20	16
AND191BRP	Red	Milky	Diffused	180	410	20	16
AND185ARP	Red	Clear	Clear	1800	3000	20	15
AND187ARP	Red	Clear	Clear	320	1000	20	24

AND120, 130, 155, 180, 134, and 116 Series - T1¾ Package Kilo Bright

Part Number	Color		Lens Description	Axial Luminous Intensity (mcd)		Test Condition (I _F -mA)	Viewing Angle 2θ _{1/2} (deg)
	Led	Lens		Min.	Typ.		
AND180CRP	Red	Clear	Clear	1800	4100	20	8
AND180BRP	Red	Clear	Clear	1000	2300	20	8
AND180ASP	Red	Clear	Clear	320	1000	20	8
AND130CR	Red	Clear	Clear	1000	2300	20	15
AND130BR	Red	Clear	Clear	560	1280	20	15
AND155CRP	Red	Clear	Clear	560	1280	20	24
AND155BRP	Red	Clear	Clear	320	720	20	24
AND155ASP	Red	Clear	Clear	153	300	20	24
AND120CR	Red	Clear	Clear	560	1280	20	35
AND120BR	Red	Clear	Clear	320	720	20	35
AND134CR	Red	Red	Diffused	100	230	20	35
AND134BR	Red	Red	Diffused	56	208	20	35
AND116CR	Red	Milky	Diffused	56	208	20	60
AND116BR	Red	Milky	Diffused	32	72	20	60

AND125 and 126 Series - T1 Package Kilo Bright

Part Number	Color		Lens Description	Axial Luminous Intensity (mcd)		Test Condition (I _F -mA)	Viewing Angle 2θ _{1/2} (deg)
	Led	Lens		Min.	Typ.		
AND125CR	Red	Clear	Clear	160	400	20	60
AND126CR	Red	Milky	Diffused	63	150	20	70



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AND125 and 126 Series - T1 Package Kilo Bright Low Current

Part Number	Color		Lens Description	Axial Luminous Intensity (mcd)		Test Condition (I _F =mA)	Viewing Angle 2θ½ (deg)
	Led	Lens		Min.	Typ.		
AND125CR (0.5 mA)	Red	Clear	Clear	—	4.0	0.5	60
AND126CR (0.5 mA)	Red	Milky	Diffused	—	2.0	0.5	70

Absolute Maximum Ratings (T_A = 25°C)

Characteristics	Symbol	Rating	Unit
		Red	
Forward Current (DC)	I _F	50	mA
Reverse Voltage	V _R	4	V
Power Dissipation	P _D	125	mW
Operating Temperature Range	T _{OPR}	−20 to +85	°C
Storage Temperature Range	T _{STG}	−30 to +100	°C

Electro-Optical Characteristics (T_A = 25°C)

Characteristics	Symbol	Test Condition	Red			Units
			Min.	Typ.	Max.	
Forward Voltage	V _F	I _F = 20mA	1.75	2.2		V
Reverse Current	I _R	V _R = 4V			100	μA
Peak Emission Wavelength	λ _P	I _F = 20mA	660			nm
Spectral Line Half Width	Δλ	I _F = 20mA	25			nm

AND 180ASP / AND155ASP

Absolute Maximum Ratings (T_A = 25°C)

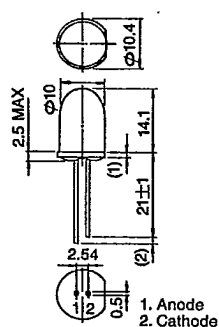
Characteristics	Symbol	Rating	Unit
		Red	
Forward Current (DC)	I _F	50	mA
Reverse Voltage	V _R	4	V
Power Dissipation	P _D	125	mW
Operating Temperature Range	T _{OPR}	−20 to +85	°C
Storage Temperature Range	T _{STG}	−30 to +100	°C

AND180ASP / AND155ASP

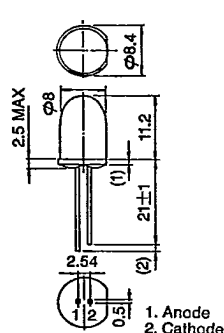
Electro-Optical Characteristics (T_A = 25°C)

Characteristics	Symbol	Test Condition	Red			Units
			Min.	Typ.	Max.	
Forward Voltage	V _F	I _F = 20mA	1.9	2.4		V
Reverse Current	I _R	V _R = 4V			100	μA
Peak Emission Wavelength	λ _P	I _F = 20mA	630			nm
Spectral Line Half Width	Δλ	I _F = 20mA	25			nm

AND190/191



AND185/187



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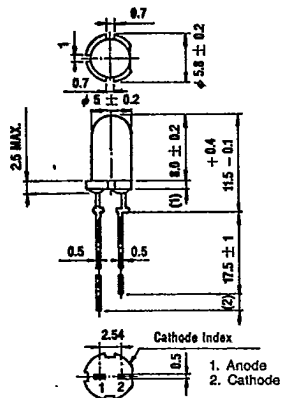
LED Lamps

KILO BRIGHT

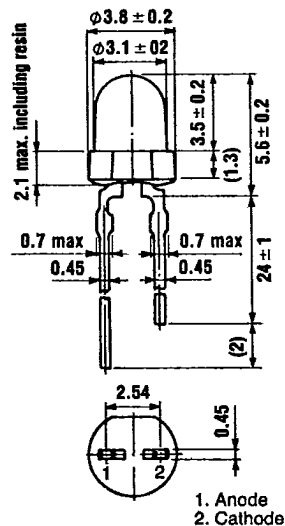
T-41-21

Outline Dimension (in millimeters)

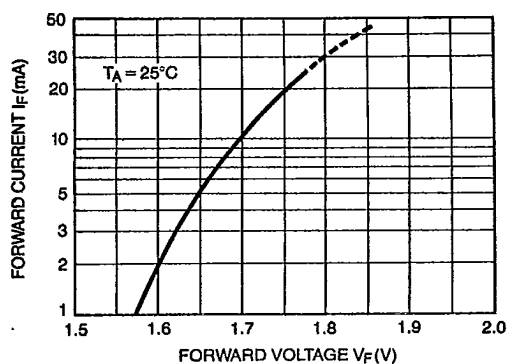
AND134 Series



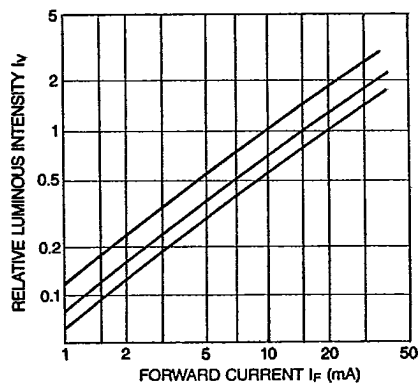
AND125/126 Series



$I_F - V_F$



$I_V - I_F$





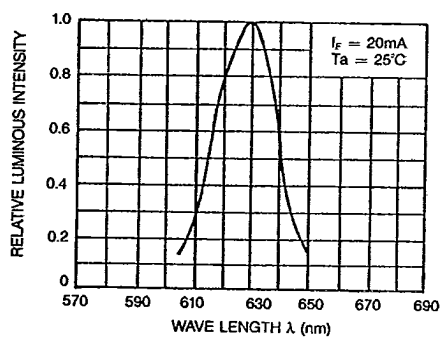
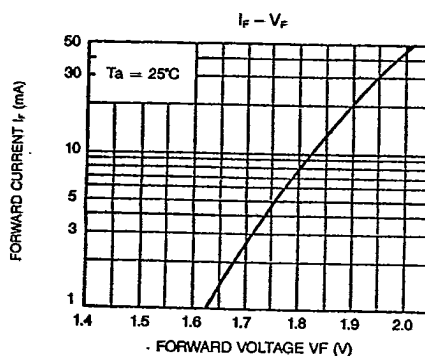
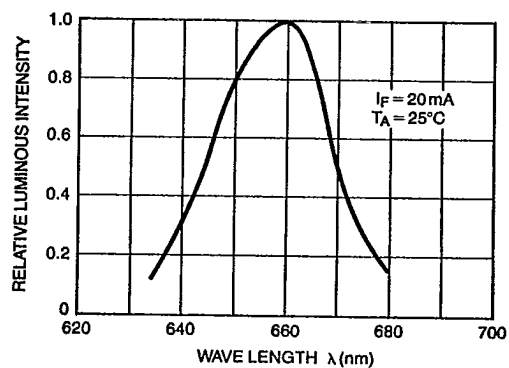
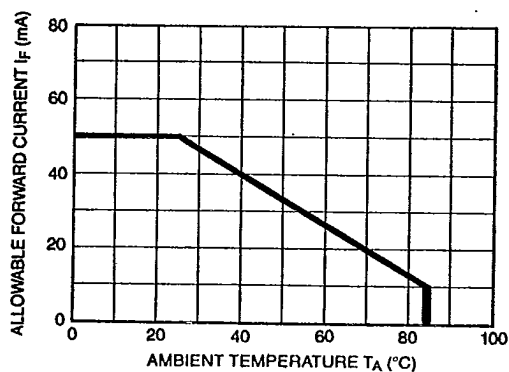
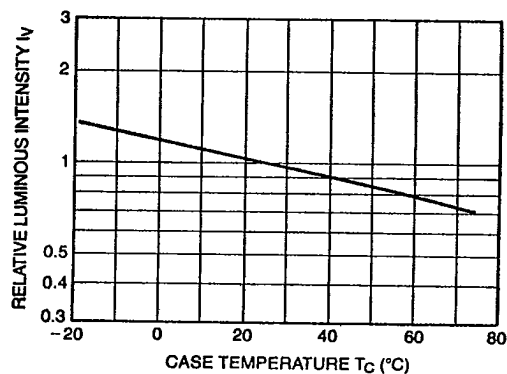
LED Lamps

KILO BRIGHT

T-41-21

AND180ASP/AND155ASP

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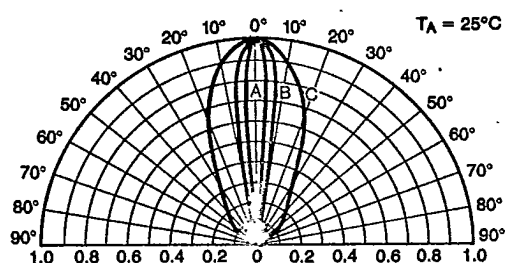


LED Lamps

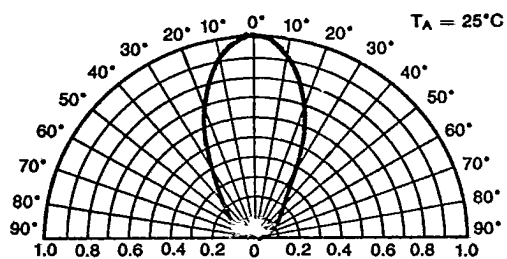
KILO BRIGHT

T-41-21

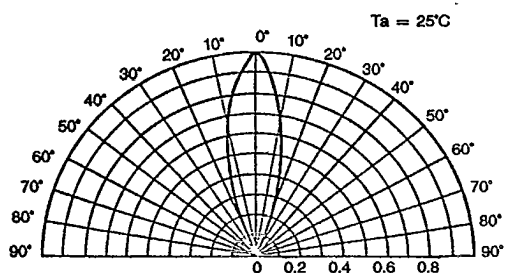
A: AND180
B: AND130
C: AND120/116



AND134



AND155



A: AND125
B: AND126

