



■ Absolute Maximum Ratings

Ta = 25°C

		Red	Green	Orange	Unit
		NAR / NKR	NAG / NKG	NAA / NKA	
Power Dissipation	Pb	37.5	48	48	mW
Forward Current	IF	15	20	20	mA
Peak Forward Current	IFM	60	80	80	mA
Reverse Voltage	VR	4	4	4	V
Operating Temp.	Topr	-30~+85	-30~+85	-30~+85	°C
Storage Temp.	Tstg	-30~+85	-30~+85	-30~+85	°C
Derating *	ΔIF	0.25	0.33	0.33	mA/°C

* The current derating for operation applies when temperature is above 25°C.

• IFM Condition : tw ≤ 1msec, Duty ≤ 1/20

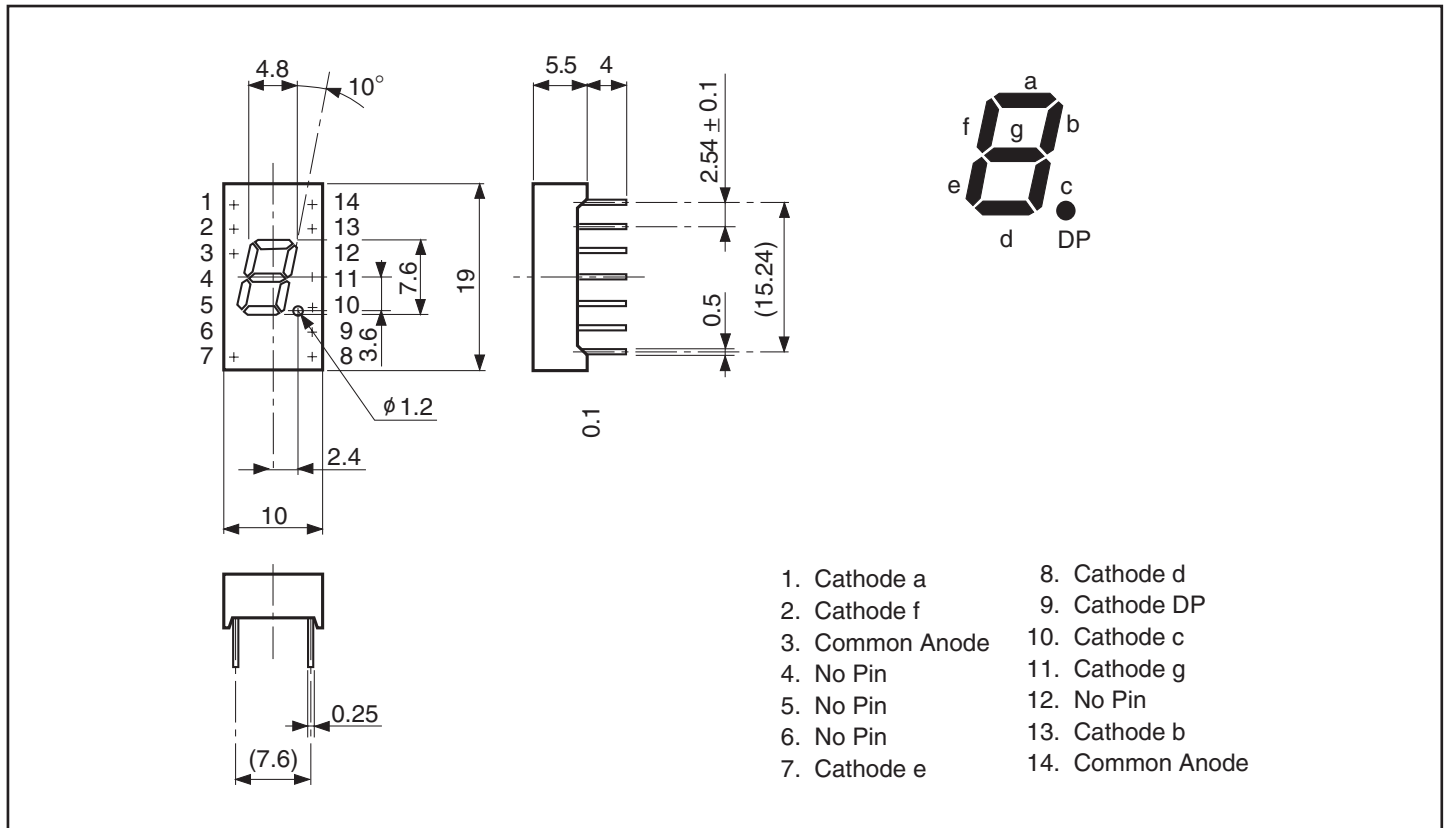
■ Electro-Optical Characteristics

Ta = 25°C

Part No.		Case Color	Chip		Luminous Intensity Iv					Wavelength λp		Forward Voltage VF			Reverse Current IR	
Anode Common	Cathode Common		Material	Emitted Color	Rank B		Rank C		IF	TYP	IF	TYP	TYP	MAX	IF	MAX
NAR131	NKR131	Black	GaAlAs	Red	0.3	0.6	—	—	10	700	10	2.0	2.5	10	100	4
NAR133	NKR133	Gray														
NAG131P	NKG131P	Black	GaP	Green	0.6	1.2	—	—	10	565	10	2.0	2.4	20	100	4
NAG133P	NKG133P	Gray														
NAA131	NKA131	Black	GaAsP	Orange	0.8	1.6	—	—	10	605	10	2.0	2.4	10	100	4
NAA133	NKA133	Gray														
Units					mcd	mcd	mcd	mcd	mA	nm	mA	V	V	mA	μA	V

■ Package Dimensions

Unit : mm



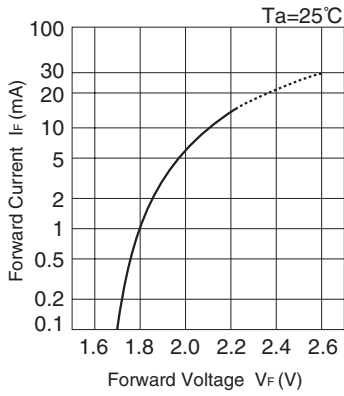
Tolerance : ± 0.25mm



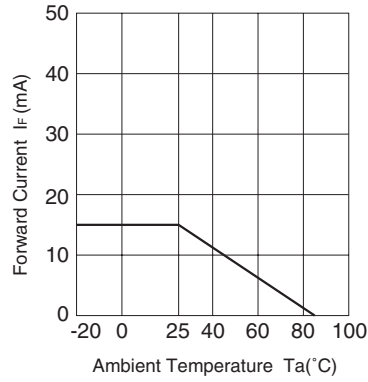
■ SUPER BRIGHT LED NUMERIC DISPLAY

NAR / NKR 131 / 133

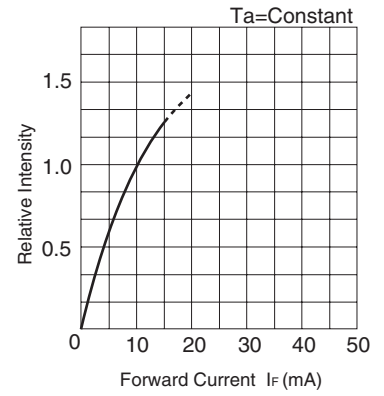
■ Forward Voltage vs. Forward Current



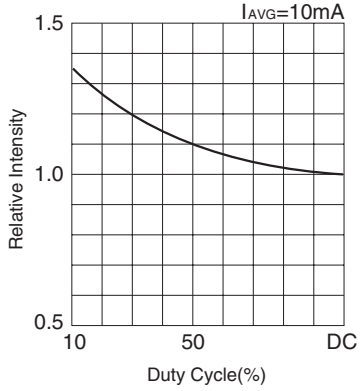
■ Ambient Temperature vs. Maximum Forward Current



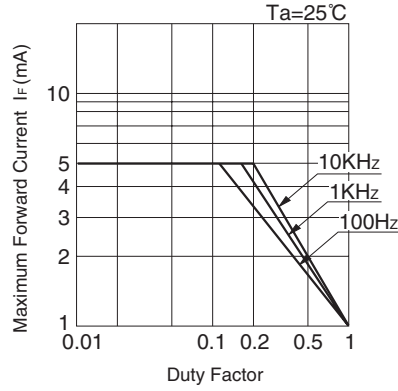
■ Forward Current vs. Relative Intensity



■ Duty Cycle vs. Relative Intensity



■ Duty Cycle vs. Maximum Forward Current

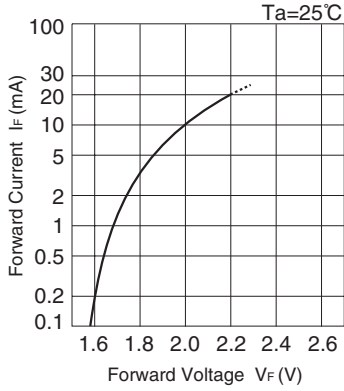




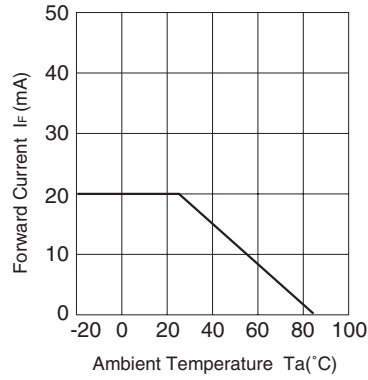
■ SUPER BRIGHT LED NUMERIC DISPLAY

NAG / NKG 131 / 133

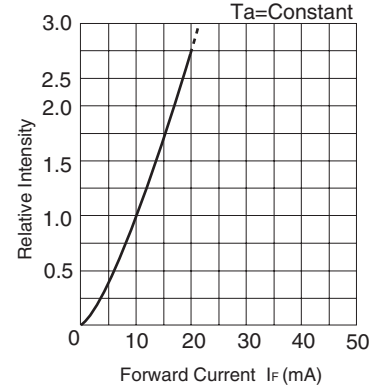
■ Forward Voltage vs. Forward Current



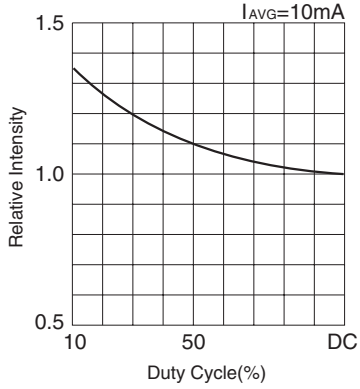
■ Ambient Temperature vs. Maximum Forward Current



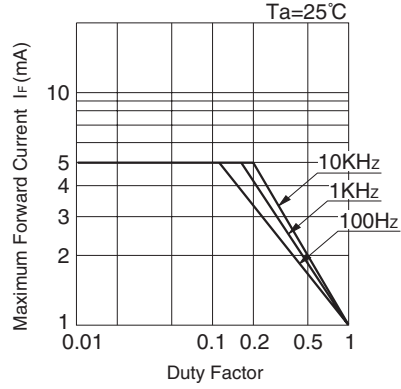
■ Forward Current vs. Relative Intensity



■ Duty Cycle vs. Relative Intensity



■ Duty Cycle vs. Maximum Forward Current

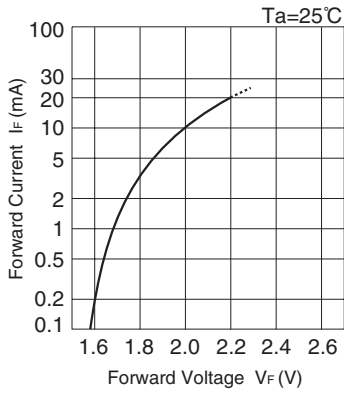




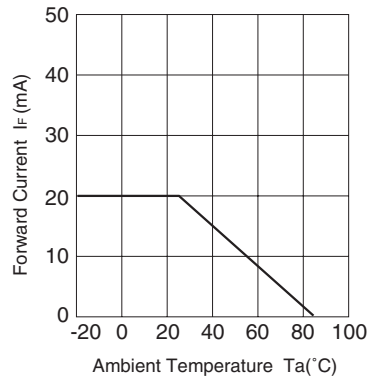
■ SUPER BRIGHT LED NUMERIC DISPLAY

NAA / NKA 131 / 133

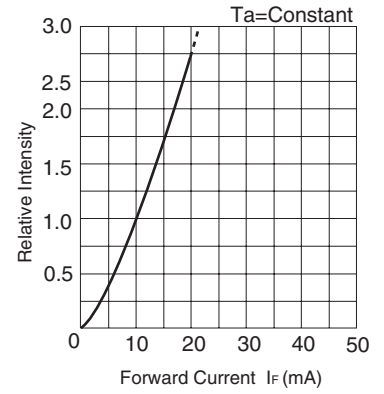
■ Forward Voltage vs. Forward Current



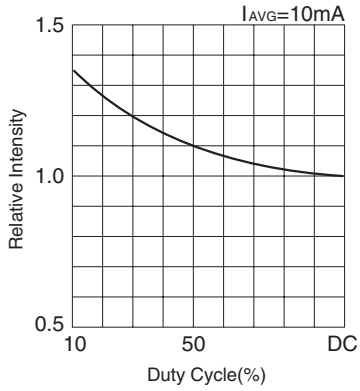
■ Ambient Temperature vs. Maximum Forward Current



■ Forward Current vs. Relative Intensity



■ Duty Cycle vs. Relative Intensity



■ Duty Cycle vs. Maximum Forward Current

