



### ■ Absolute Maximum Ratings

Ta = 25°C

		Red	Green	Orange	Unit
		NSR	NSG	NSA	
Power Dissipation	Pb	60	63	63	mW
Forward Current	IF	30	25	25	mA
Peak Forward Current	IFM	120	100	100	mA
Reverse Voltage	VR	4	4	4	V
Operating Temp.	Topr	-40~+85	-40~+85	-40~+85	°C
Storage Temp.	Tstg	-40~+85	-40~+85	-40~+85	°C
Derating *	ΔIF	0.41	0.34	0.34	mA/°C

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

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

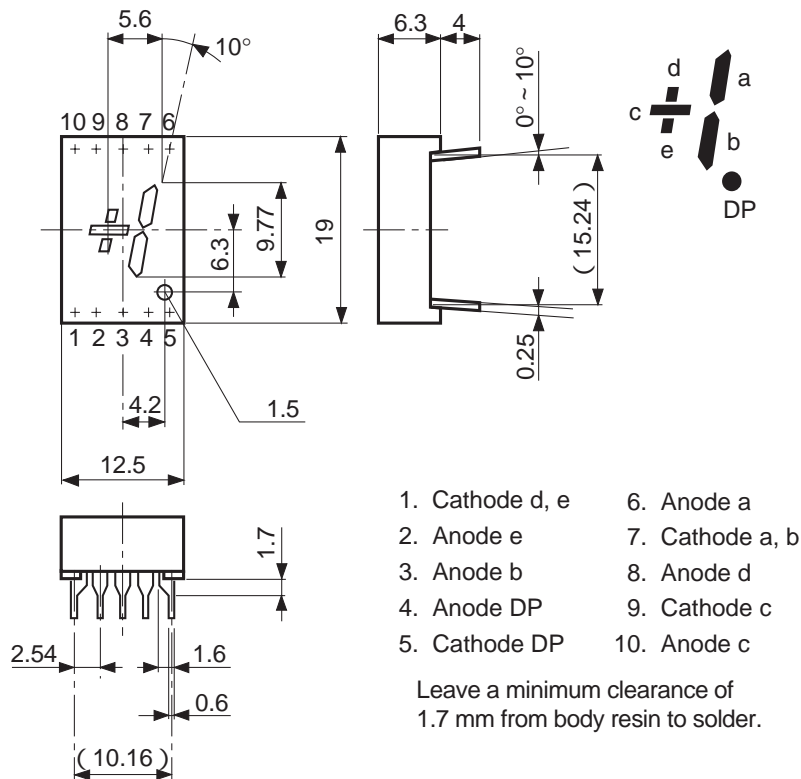
### ■ Electro-Optical Characteristics

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	MAX	IF	MAX	VR
NSR145		Black	GaAlAs	Red	3.2	6.4	6.4	8.8	20	660	20	1.7	20	20	100	4
NSR147		Gray														
NSG145P		Black	GaP	Green	0.8	1.6	—	—	20	565	20	2.2	2.5	20	100	4
NSG147P		Gray														
NSA145		Black	GaAsP	Orange	2.4	4.8	—	—	20	605	20	2.2	2.5	20	100	4
NSA147		Gray														
Units					mcd	mcd	mcd	mcd	mA	nm	mA	V	V	mA	μA	V

### ■ Package Dimensions

Unit : mm



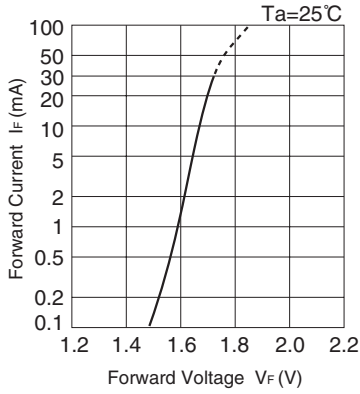
Tolerance : ± 0.25mm



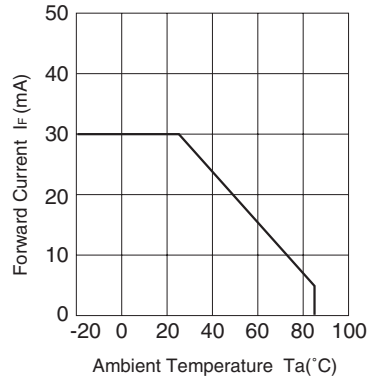
# ■ SUPER BRIGHT LED NUMERIC DISPLAY

## NSR145 / NSR147 Series

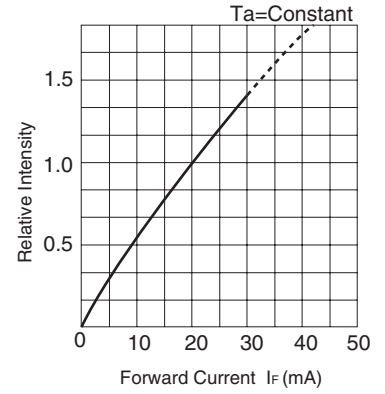
■ Forward Voltage vs. Forward Current



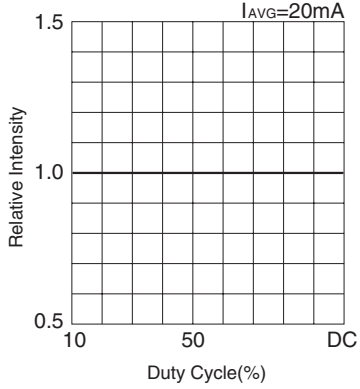
■ Ambient Temperature vs. Maximum Forward Current



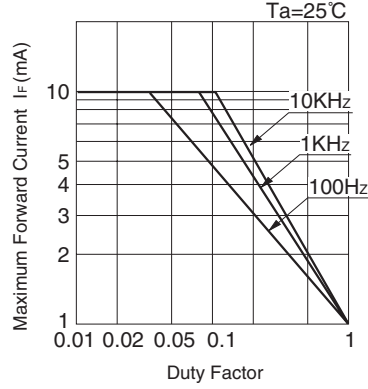
■ Forward Current vs. Relative Intensity



■ Duty Cycle vs. Relative Intensity



■ Duty Cycle vs. Maximum Forward Current

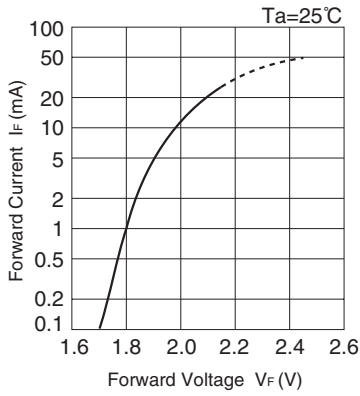




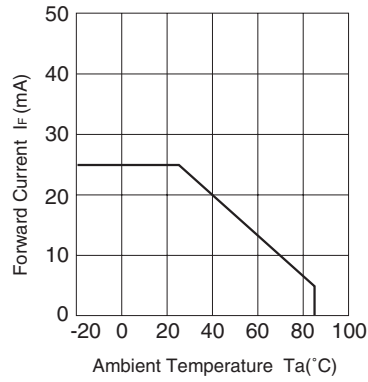
# ■ SUPER BRIGHT LED NUMERIC DISPLAY

## NSG145 / NSG147 Series

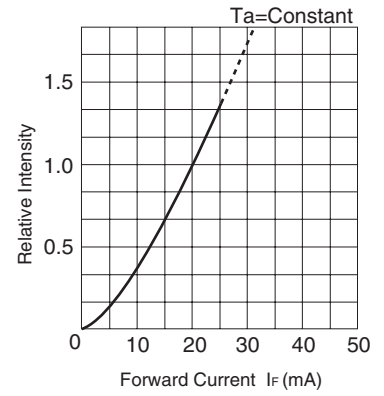
■ Forward Voltage vs. Forward Current



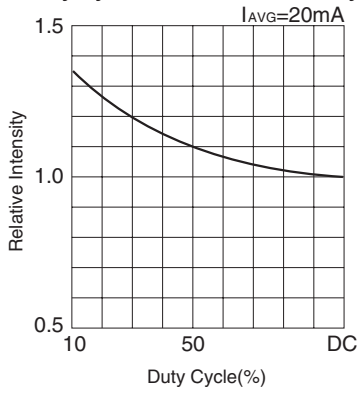
■ Ambient Temperature vs. Maximum Forward Current



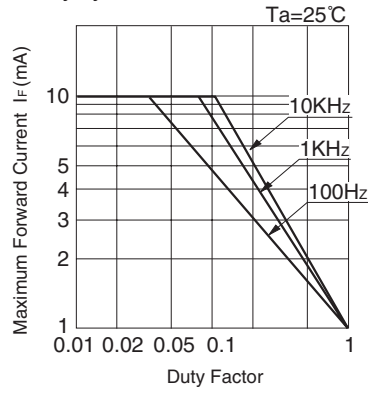
■ Forward Current vs. Relative Intensity



■ Duty Cycle vs. Relative Intensity



■ Duty Cycle vs. Maximum Forward Current

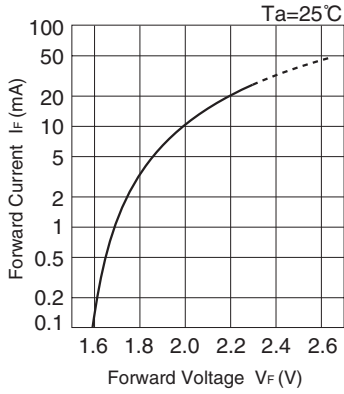




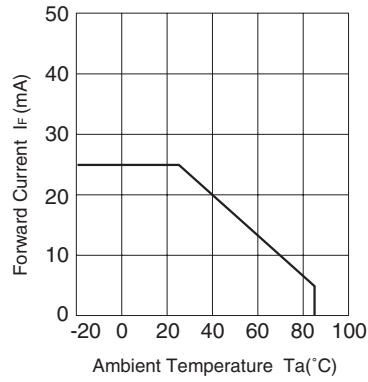
# ■ SUPER BRIGHT LED NUMERIC DISPLAY

## NSA145 / NSA147 Series

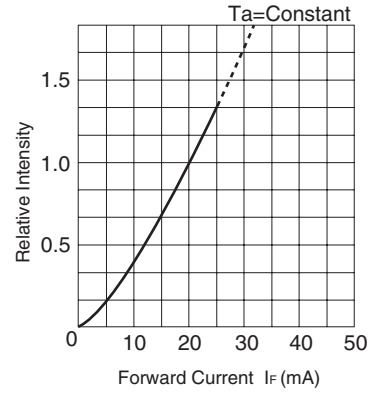
■ Forward Voltage vs. Forward Current



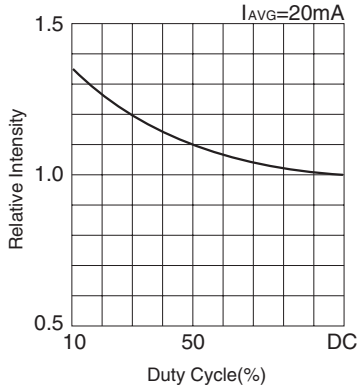
■ Ambient Temperature vs. Maximum Forward Current



■ Forward Current vs. Relative Intensity



■ Duty Cycle vs. Relative Intensity



■ Duty Cycle vs. Maximum Forward Current

