

Illuminated Pushbutton

## Specifications

Electrical Ratings	100mA @ 30VDC	Dielectric Strength	250Vrms min
Electrical Life	20,000 cycles typical	Insulation Resistance	>100MΩ min
Contact Resistance	≤ 200Ω initial	Operating Temperature	-40°C to 85°C
Actuation Force	160 ± 50gF	Storage Temperature	-40°C to 85°C
Actuation Travel	1.4 ± .2mm		

## Materials

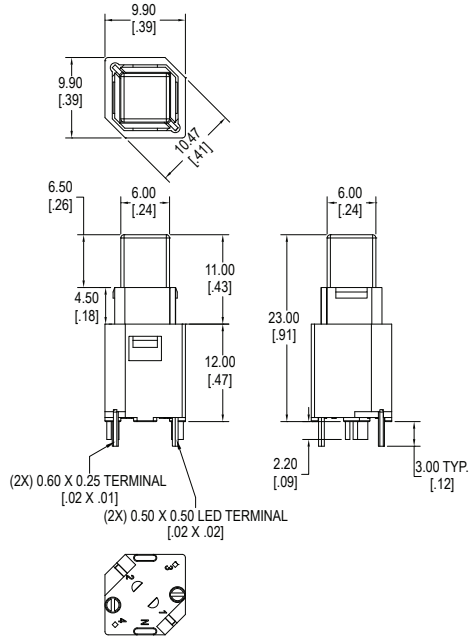
Actuator	6/6 Nylon
Housing	6/6 Nylon
Cap	PolyCarbonate
Contacts	Conductive Rubber
Terminals	Brass, Gold Plated

## Ordering Information

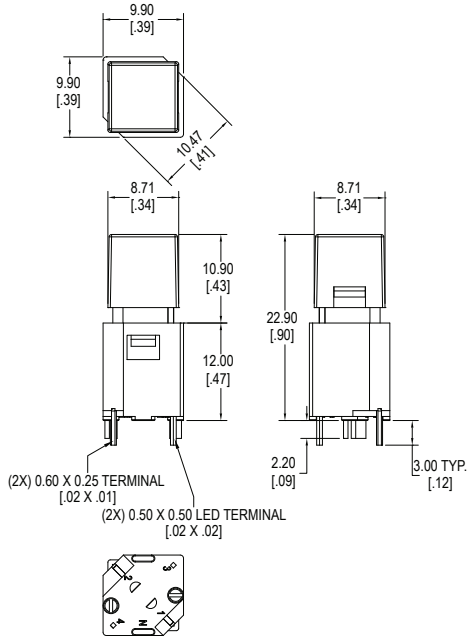
1. Series	RT	A	1	W
RT				
2. Actuator Style				
A				
B				
C				
D				
E				
3. Actuator Color				
0 = Clear, semi-transparent	0T = Clear, transparent			
1 = White, semi-transparent				
3 = Red, semi-transparent	3T = Red, transparent			
4 = Yellow, semi-transparent	4T = Yellow, transparent			
5 = Green, semi-transparent	5T = Green, transparent			
7 = Blue, semi-transparent	7T = Blue, transparent			
2 = Black opaque for use with laser etching				
9 = Dark Gray opaque for use with laser etching				
MS = Misty Silver opaque for use with laser etching				
4. LED Color				
X = No LED	RY = Red/Yellow dual LED			
R = Red	RG = Red/Green dual LED			
Y = Yellow	RB = Red/Blue dual LED			
G = Green	YG = Yellow/Green dual LED			
PG = Pure Green	YB = Yellow/Blue dual LED			
B = Blue	GB = Green/Blue dual LED			
W = White	RGB = RGB LED			
	**White & Pure Green are only available as a single color LED			
5. Laser Etching Styles				
Blank = No laser etching				
A	F			
B	G			
C	H			
D	I			
E	J			

## Illuminated Pushbutton

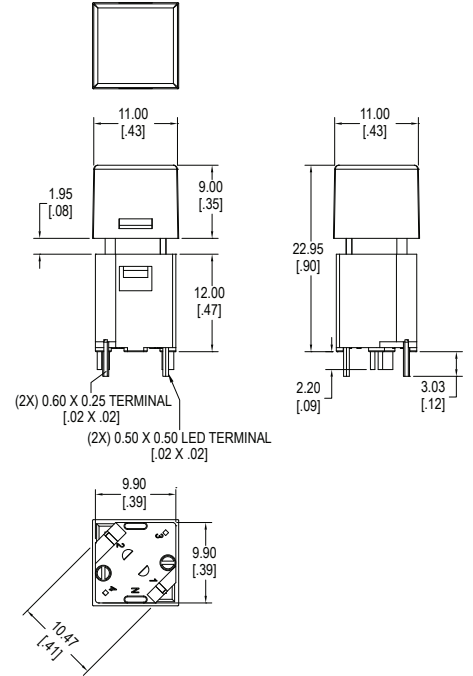
### Dimensions - Standard LED



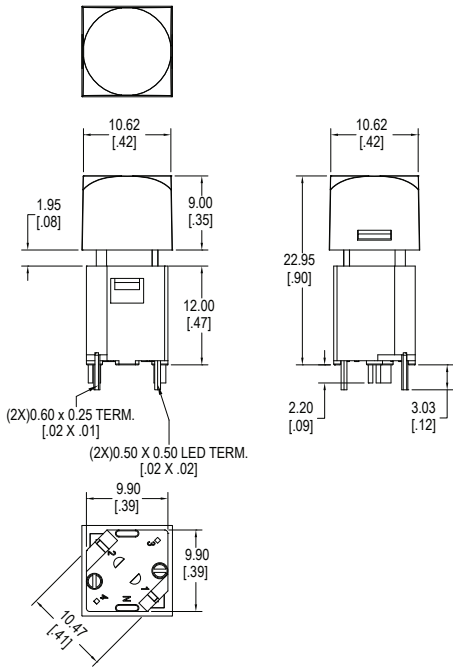
**A**



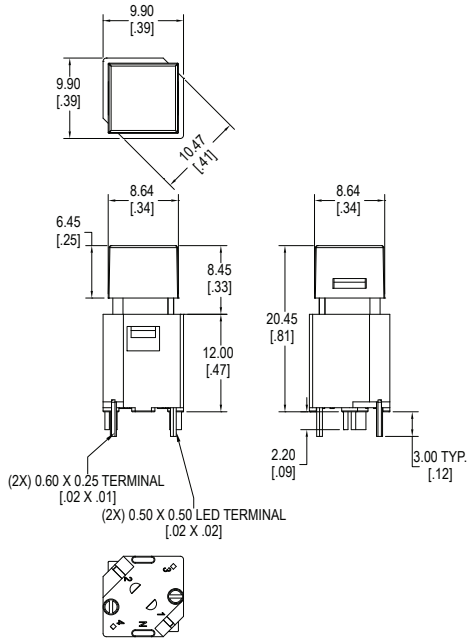
**B**



**C**

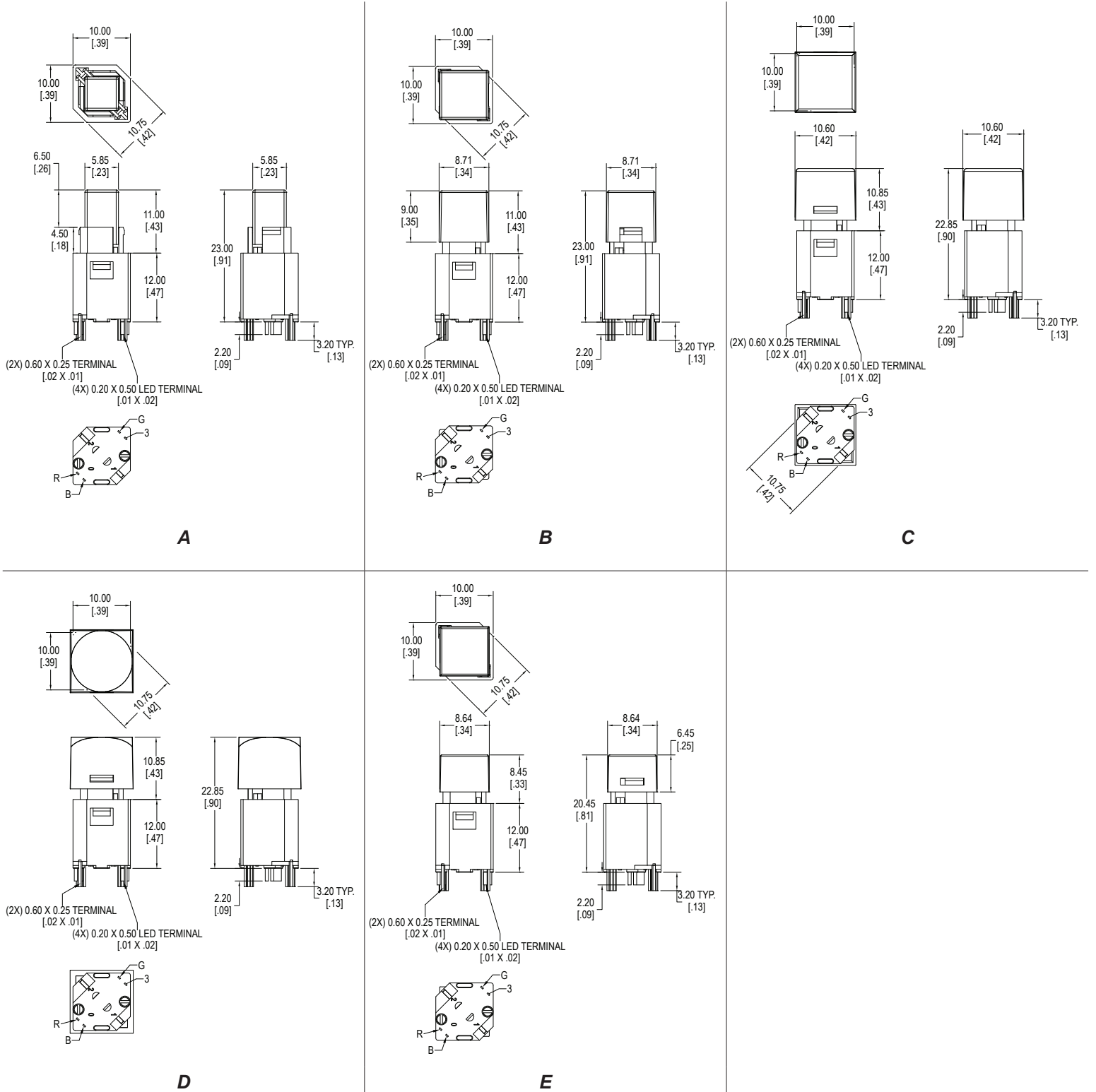


**D**

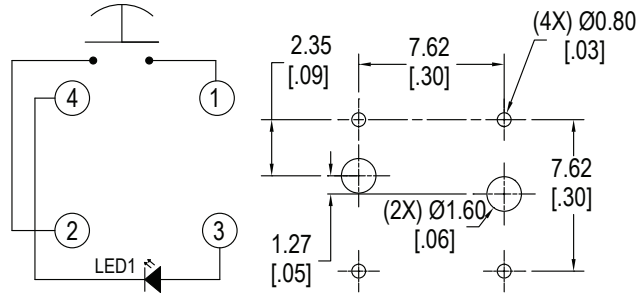


**E**

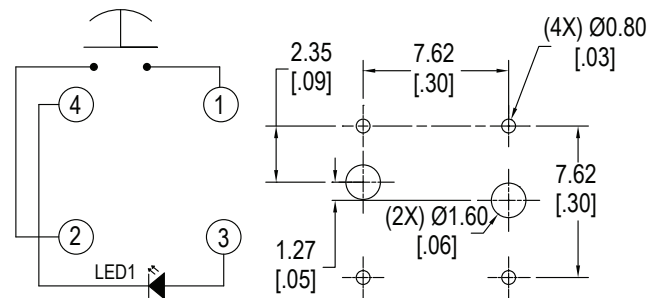
### Dimensions - RGB LED



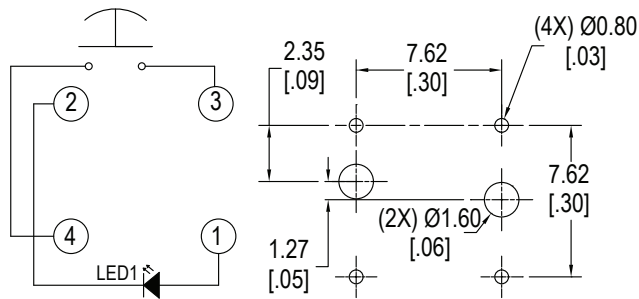
**Schematics & PC Layout**



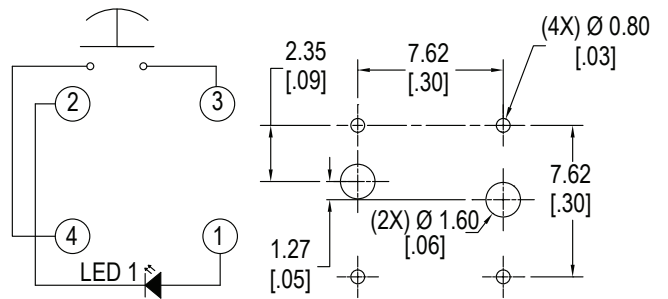
**A**



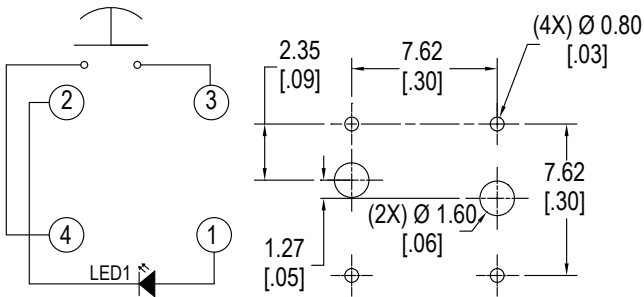
**B**



**C**

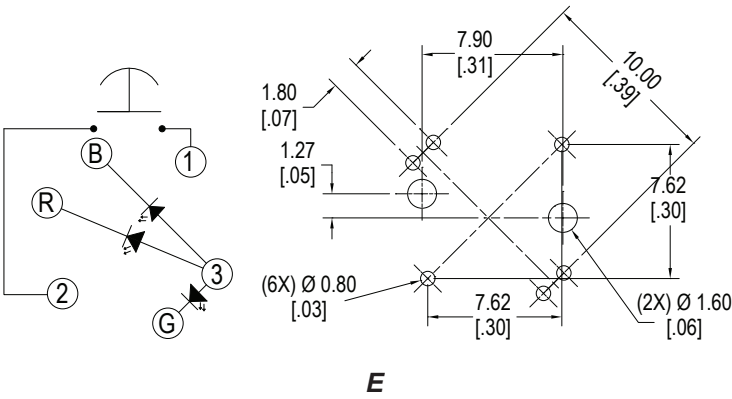
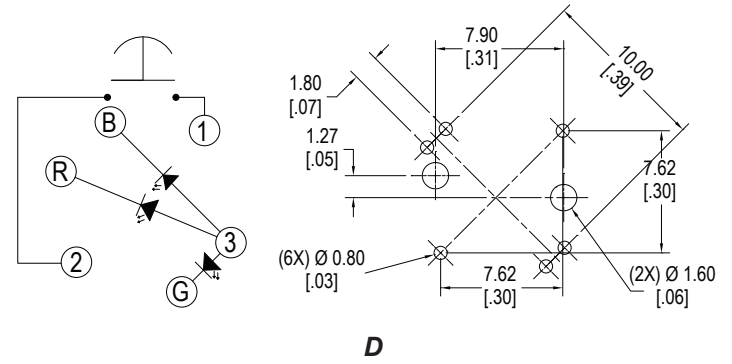
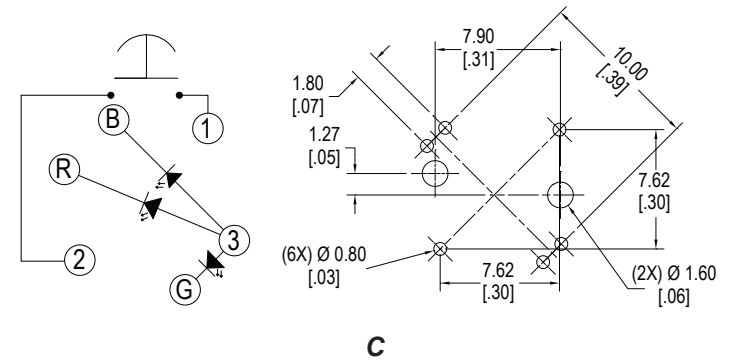
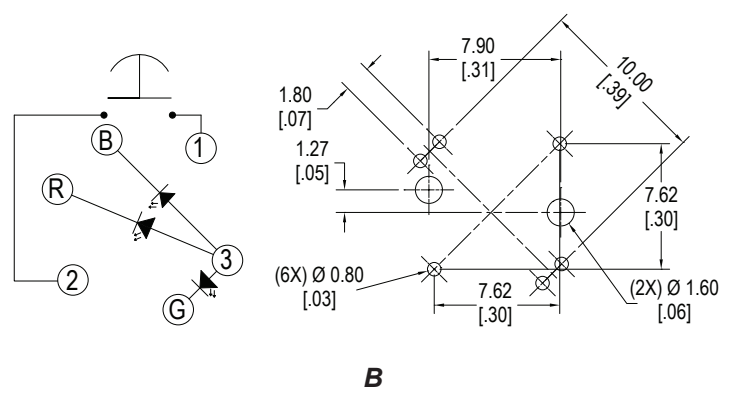
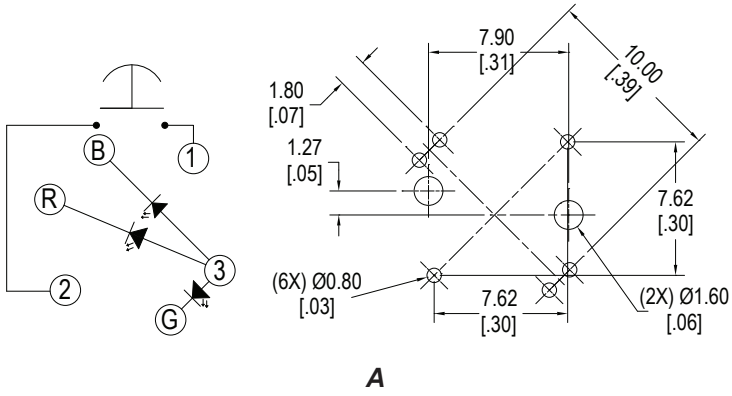


**D**



**E**

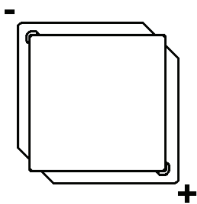
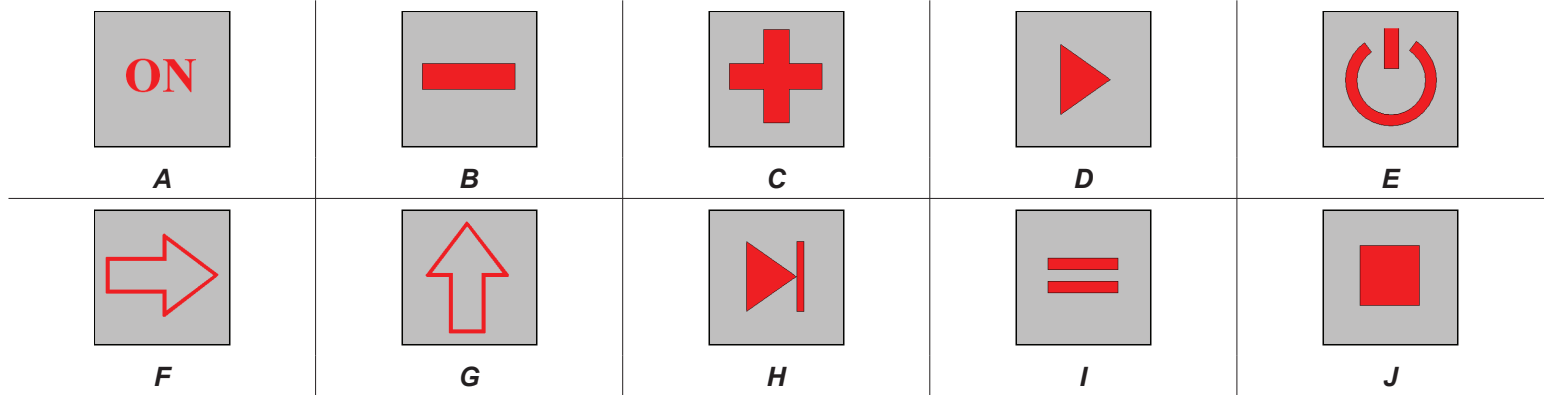
**Schematics & PC Layout - RGB LED**



### LED Characteristics

LED Ratings		Color						Units
		R	Y	G	B	PG	W	
Reverse Voltage	$V_R$	5	5	5	5	5	5	V
Forward Current (avg)	$I_F$	30	30	30	30	30	30	mA
Forward Current (peak)	$I_{FS}$	90	60	120	100	100	100	mA
Reverse Current $V_R = 5V$	$I_R$	50	10	10	50	50	50	$\mu A$
Power Dissipation	$P_T$	75	75	100	120	120	120	mW
Operating & Storage Temperature	$T_A$	-40 ~ +85						$^{\circ}C$
Forward Voltage (typ) $I_F = 20mA$	$V_F$	2.1	1.7	1.7	3.5	3.5	3.5	V
Forward Voltage (max) $I_F = 20mA$	$V_F$	2.4	2.6	2.6	4.0	4.0	4.0	V
Wavelength at Peak Emmission, $I_F = 20mA$	$\lambda_P$	630	590	565	470	525	n/a	nm
Spectral Line Half-Width, $I_F = 20mA$	$\Delta\lambda$	20	20	30	30	36	n/a	nm
Luminous Intensity, $I_F = 20mA$	LI	50	350	90	1500	1100	2700	mcd
Viewing Angle	$\Theta$	44	40	44	30	28	40	deg

### Laser Etching Styles



All laser etching styles will be orientated with the + terminal located on the right hand side with respect to the legend.