

- Features**
- 1.6 x 0.8 mm (0603) footprint
 - High intensity
 - Wide viewing angle
 - Flat water clear epoxy lens
 - Suitable for reflow soldering
 - Supplied on 178 mm dia reel
 - Quantity per reel 4000 pieces



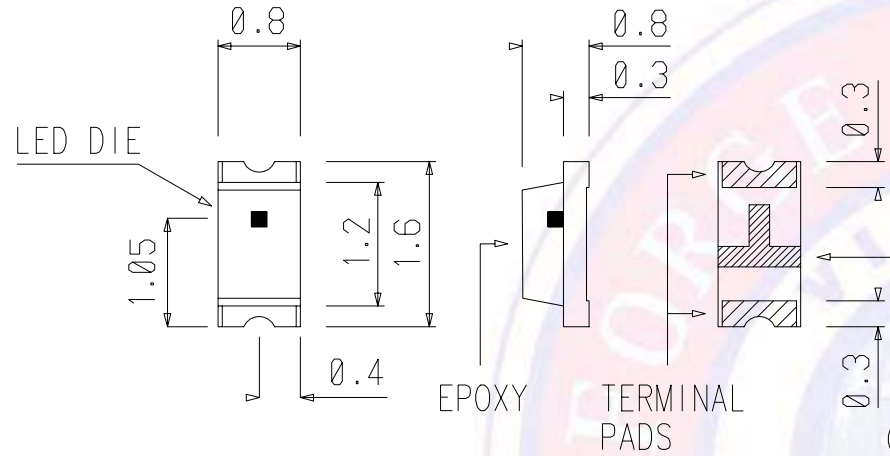
Electro / Optical Characteristics $I_F = 20 \text{ mA}$ $T_a = 25^\circ \text{ C}$

Part Number	Emitting Colour	Epoxy Type	Die Material	Wavelength		Forward Voltage V_F		Luminous intensity I_V		Viewing \angle 20½
				Peak λ_p	Dominant λ_d	typical	max	min	typical	
FA-190UDR	Red	WC	AlGaInP	655	640	2.10	2.50	-	55	130
FA-190UHR	Red	WC	AlGaInP	645	631	2.10	2.60	-	80	130
FA-190USD	Orange	WC	AlGaInP	630	625	2.10	2.60	-	70	130
FA-190UHD	Orange	WC	AlGaInP	618	615	2.10	2.60	-	110	130
FA-190USO	Amber	WC	AlGaInP	610	605	2.10	2.60	-	80	130
FA-190UHY	Yellow	WC	AlGaInP	592	590	2.10	2.60	-	70	130
FA-190UYS	Yellow	WC	AlGaInP	587	585	2.10	2.60	-	75	130
FA-190UYG	Green	WC	AlGaInP	574	575	2.20	2.70	-	40	130
FA-190UPG	Green	WC	AlGaInP	568	565	2.10	2.70	-	15	130
Units				nm		V		mcd		deg

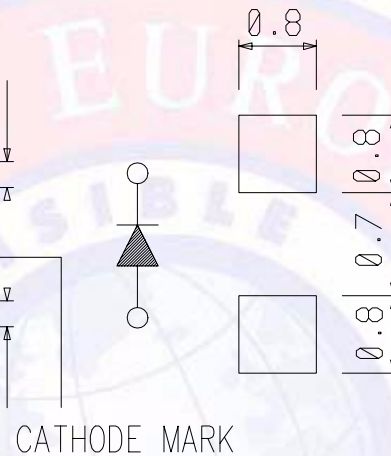
Maximum Ratings $T_a = 25^\circ \text{ C}$ (Derate linear above 25° C 0.4 mA per $^\circ \text{ C}$)

Characteristic	Condition	Symbol	Rating	Units
Pulse Forward Current	0.1 duty cycle 0.1 ms pulse width	I_{FP}	100	mA
DC Forward Current		I_F	30	mA
Reverse Voltage	$I_R = 10 \mu\text{A}$	V_R	5	V
Power Dissipation		P_D	78	mW
Operating Temperature		T_{opr}	- 30 to + 80	$^\circ \text{ C}$
Storage Temperature		T_{stg}	- 40 to + 85	$^\circ \text{ C}$

Package Outline

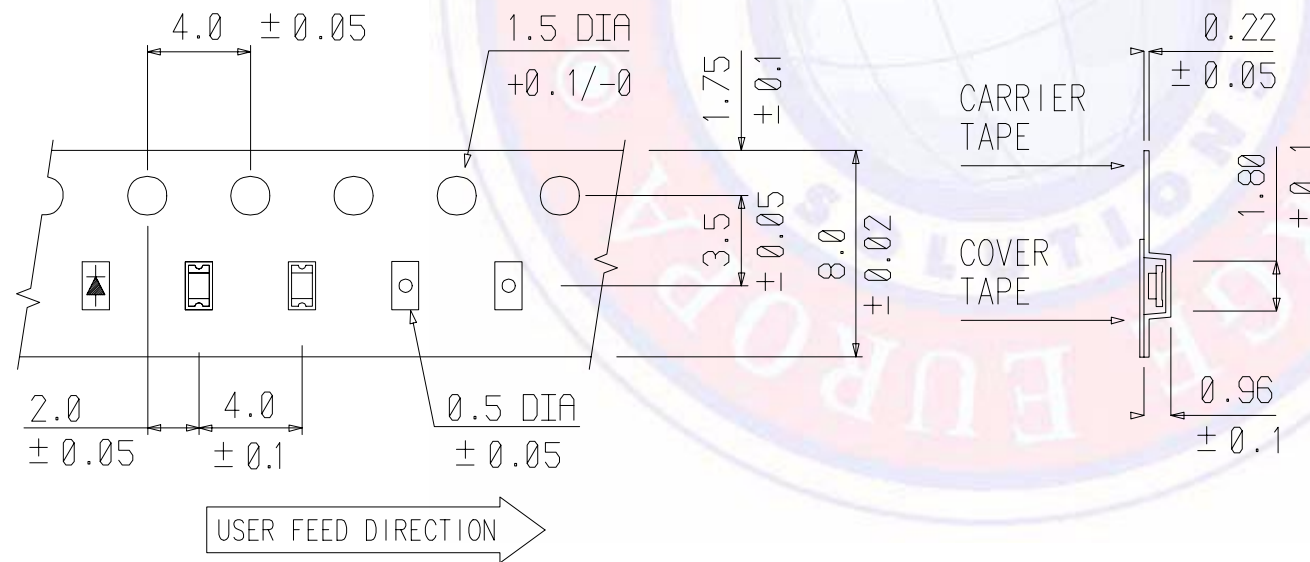
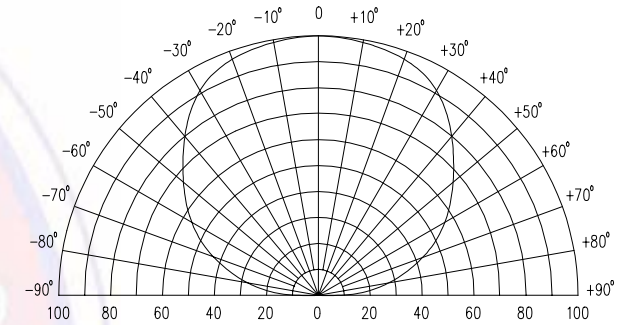


Solder Pad Pattern



Radiation Diagram

$T_a = 25^\circ\text{C}$ $I_F = 20\text{ mA}$



Tape Dimensions

Dimensions in mm
Tolerance ± 0.1 mm unless stated