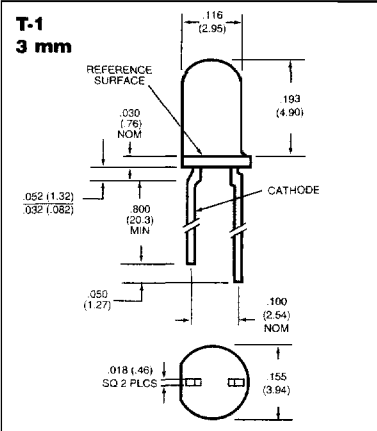
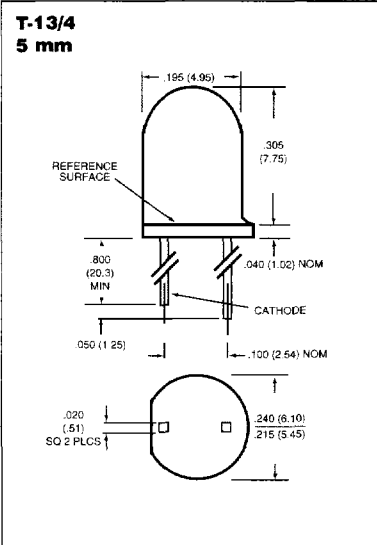


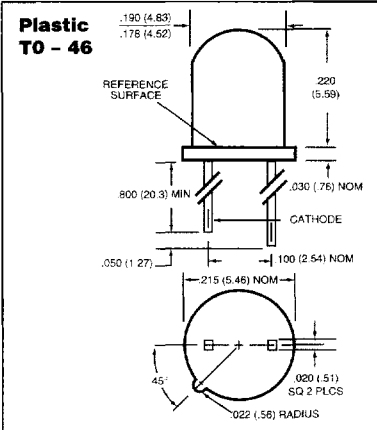
PLASTIC INFRARED LIGHT EMITTING DIODES



Part Number	Emission Angle	Radiant Intensity		V_f/I_f (V)/(mA)	I_R/V_R (μ A)/(V)	Notes	
		min	max units				
940 nm GaAs							
QEC112	$\pm 8^\circ$	6	30	mW/sr	1.50/20	10/5	1
QEC113	$\pm 8^\circ$	14	—	mW/sr	1.50/20	10/5	1
880 nm AlGaAs							
QEC121	$\pm 8^\circ$	14	—	mW/sr	1.70/20	10/5	1
QEC122	$\pm 8^\circ$	27	94	mW/sr	1.70/20	10/5	1
QEC123	$\pm 8^\circ$	39	—	mW/sr	1.70/20	10/5	1

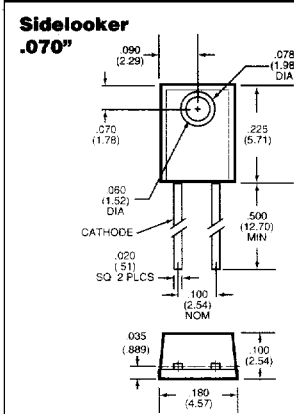


Part Number	Emission Angle	Radiant Intensity		V_f/I_f (V)/(mA)	I_R/V_R (μ A)/(V)	Notes	
		min	max units				
940 nm GaAs							
QED233	$\pm 20^\circ$	10	53	mW/sr	1.50/20	10/5	1
QED234	$\pm 20^\circ$	27	—	mW/sr	1.50/20	10/5	1
880 nm AlGaAs							
QED121	$\pm 9^\circ$	20	40	mW/sr	1.70/20	10/5	1
QED122	$\pm 9^\circ$	50	100	mW/sr	1.70/20	10/5	1
QED123	$\pm 9^\circ$	80	—	mW/sr	1.70/20	10/5	1
QED221	$\pm 20^\circ$	10	20	mW/sr	1.70/20	10/5	1
QED222	$\pm 20^\circ$	16	32	mW/sr	1.70/20	10/5	1
QED223	$\pm 20^\circ$	25	—	mW/sr	1.70/20	10/5	1

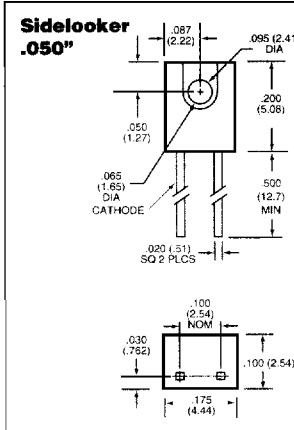


Part Number	Emission Angle	Radiant Intensity		V_f/I_f (V)/(mA)	I_R/V_R (μ A)/(V)	Notes	
		min	max units				
880 nm AlGaAs							
QED422	$\pm 30^\circ$	10	50	mW/sr	1.70/20	10/5	1
QED423	$\pm 30^\circ$	18	—	mW/sr	1.70/20	10/5	1
QED522	$\pm 15^\circ$	20	94	mW/sr	1.70/20	10/5	1
QED523	$\pm 15^\circ$	40	—	mW/sr	1.70/20	10/5	1

Dimensions for all drawings are in inches (millimeters).
Tolerance of $\pm .010$ (.25) unless otherwise stated on all non-nominal dimensions.



Part Number	Emission Angle	Radiant Intensity			V_f/I_f (V)/(mA)	I_R/V_R (μ A)/(V)	Notes
		min	max	units			
940 nm GaAs							
F5F1	$\pm 35^\circ$.28	—	mW/sr	1.70/60	10/6	2
880 nm AlGaAs							
F5G1	$\pm 35^\circ$.60	—	mW/sr	1.70/50	10/6	2



Part Number	Emission Angle	Radiant Intensity			V_f/I_f (V)/(mA)	I_R/V_R (μ A)/(V)	Notes
		min	max	units			
940 nm GaAs							
QEE113	$\pm 25^\circ$	3	12	mW/sr	1.50/20	10/5	1
880 nm AlGaAs							
QEE122	$\pm 25^\circ$	4	16	mW/sr	1.70/20	10/5	1
QEE123	$\pm 25^\circ$	8	—	mW/sr	1.70/20	10/5	1

Notes (Applies to all components on pages 31 and 32.)

1. $I_e @ I_f = 100$ mA pulsed
2. $I_e @ I_f = 20$ mA pulsed

Maximum Ratings Table A (Applies to all components on pages 31 and 32.)

Storage Temperature	-40 to +100° C
Operating Temperature	-40 to +100° C
Soldering:	
Lead Temperature (Iron)	240° C for 5 s
Lead Temperature (Flow)	260° C for 10 s
Reverse Voltage (QEC, QED, QEE)	5.0 V
Reverse Voltage (F5F, F5G)	6.0 V
Continuous Forward Current (QEC, QEE, F5G)	50 mA
Continuous Forward Current (F5F)	60 mA
Continuous Forward Current (QED)	100 mA
Power Dissipation (QEC, QEE, F5F, F5G)	100 mW
Derate linearly at 1.33 mW/°C above 25° C	
Power Dissipation (QED)	200 mW
Derate linearly at 2.67 mW/°C above 25° C	