Photodevices

light emitting diodes (infrared emitting)

book1 part 3

GaAs diodes emitting near infrared radiation for use in optical transmission of information, optoelectronic couplings and monochromatic sources

Type No.	Spectral Emission (μm)	Description	Drawing reference	I_{FRM} max. (mA)	I_F max. (mA)	I_e min. at 20mA (μW/sr)	t_r typ. (ns)	T_j Temperature Range (°C)
CQY11B	0.875	Modified TO-18 encapsulation with plane window	AT4	200	30	38	30	−55 +150
CQY11C	0.875	Modified TO-18 encapsulation with lensed window	AU1	200	30	1250 (typ.)	30	−55 +150
CQY50	0.93	Subminiature encapsulation with lensed window	G1	500	100	180	600	−65 +150
CQY52	0.93		G1	500	100	450	600	−65 +150
CQY49B	0.93	Modified TO-18 encapsulation with plane window	AT4	500	150	300 (at 50mA)	600	−40 +125
CQY49C	0.93	Modified TO-18 encapsulation with lensed window	AU3	500	150	3000 (at 50mA)	600	−40 +125
CQY58	0.875	Plastic encapsulation with lensed window	CG1	200	50	–	–	−40 +100

visible light emitting diodes (LEDs)

Visible LEDs have the advantages of semiconductors (long life, reliability, etc) and the higher brightness of incandescent lamps. These factors combine to make LEDs ideal for use in most environmental conditions experienced by computer, industrial and domestic users.

Type No.	Lens	Luminous Intensity Min. (mcd)	Luminous Intensity Typ. (mcd)	at I_F (mA)	Forward Voltage Max. (V)	Forward Voltage at I_F (mA)	Drawing reference
RED EMITTING							
CQY24A	Red diffuse	0.3	1.6	20	2.0	20	P1
CQY46	Red clear	0.4	0.8	20	2.0	20	P1
CQY47	Colourless clear	0.4	0.8	20	2.0	20	P1
CQY61A	Colourless diffuse	0.5	1.5	20	2.0	20	P1
CQY54	Red diffuse	–	0.9	20	2.0	20	CG3
CQY79	Red diffuse	–	0.4	20	2.0	20	X4
CQY88	Red diffuse	–	0.3	5	10	5	CG1
GREEN EMITTING							
CQY94	Green diffuse	0.3	1.0	10	3.0	20	CF
CQY95	Green diffuse	0.3	1.0	10	3.0	20	CG3
YELLOW EMITTING							
CQY96	Yellow diffuse	0.5	–	10	3.0	20	CF
CQY97	Yellow diffuse	0.3	–	10	3.0	20	CG3