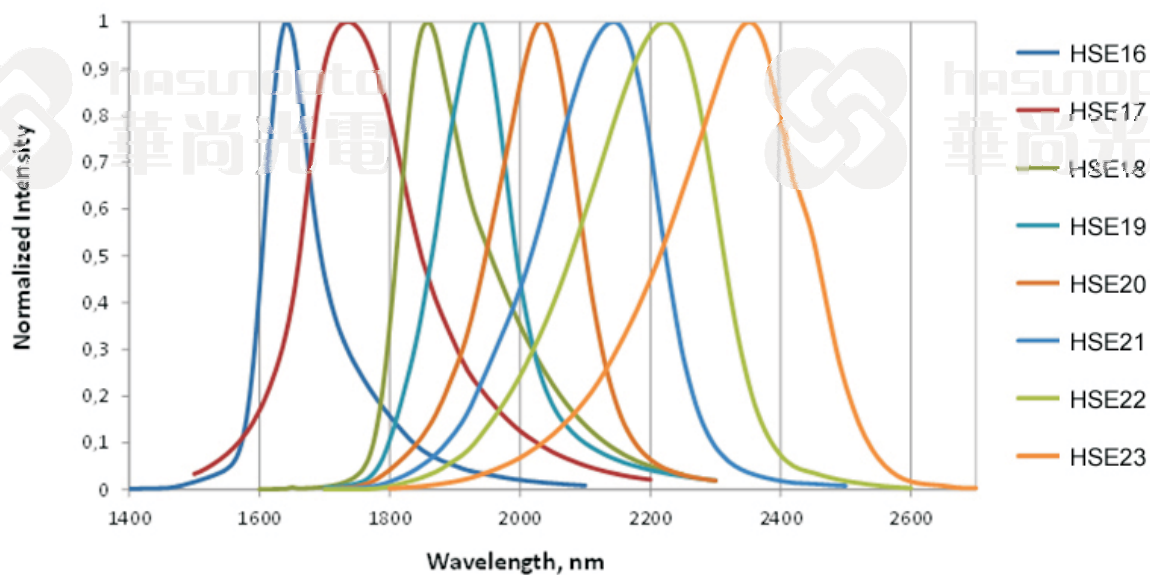
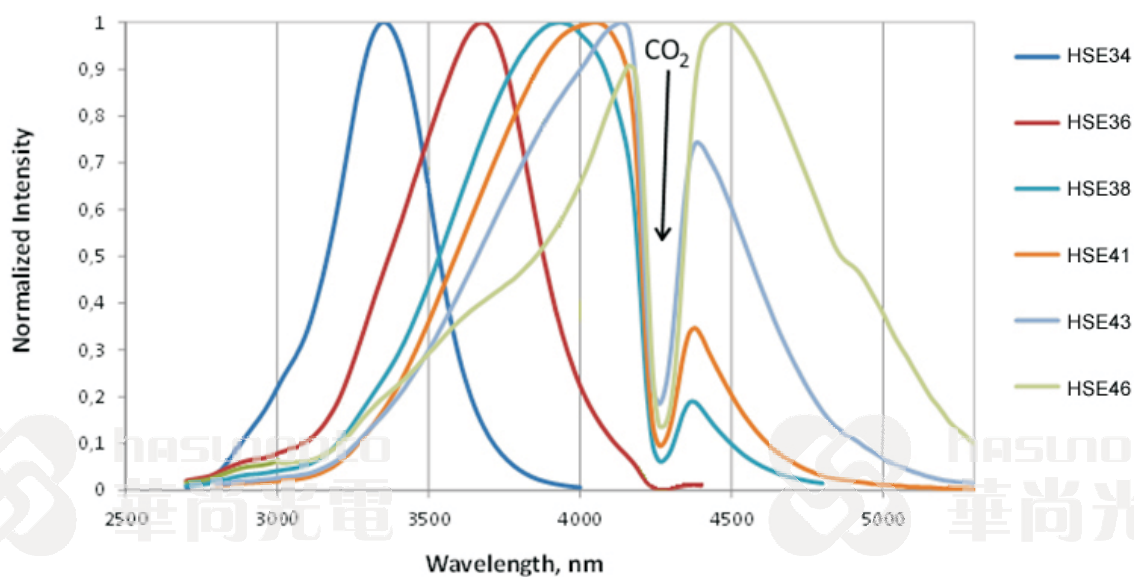


quasi-CW mode, f=0.5kHz, current 200 mA



quasi-CW mode, f=0.5kHz, current 200 mA





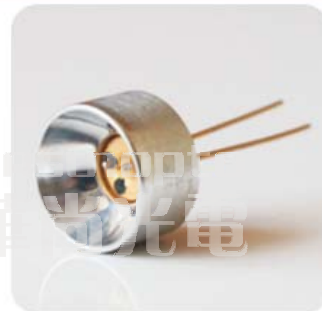
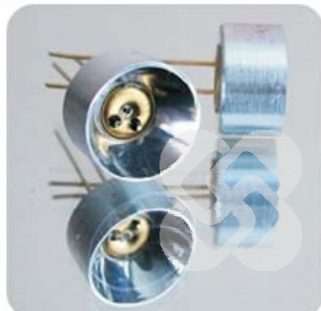
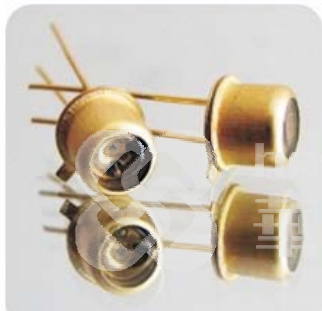
Model	Peak emission wavelength, $\mu\text{m}$		FWHM of the emission band, nm		Power, mW				Voltage, V	Maximum operating current, mA	
					QCW mode *		Pulse mode **			QCW mode	Pulse mode
	min	max	min	max	min	max	min	max			
HSE16	1.61	1.69	100		4	8	-	-	0.8-1.1	250	-
HSE17	1.71	1.76	150	250	5.5	7.5	-	-	0.5-1.0	200	-
HSE18	1.80	1.89	100	200	0.7	1.1	15	25	0.5-1.5	250	2000
HSE19	1.90	1.99	100	200	0.8	1.2	20	30	0.5-1.5	250	2000
HSE20	2.00	2.09	150	250	0.8	1.2	20	30	0.5-1.5	250	2000
HSE21	2.10	2.19	150	250	0.8	1.2	15	25	0.5-1.0	250	2000
HSE22	2.20	2.29	150	250	0.8	1.2	15	25	0.5-1.0	250	2000
HSE23	2.30	2.39	170	270	0.6	1.0	12	20	0.5-1.0	250	2000

LED Flip-Chip models (top surface of a LED chip is free of contacts)

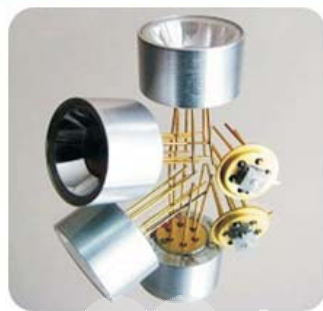
HSE16-FC	<b>discontinued</b>										
HSE17-FC	<b>discontinued</b>										
HSE18-FC	1.80	1.89	100	180	0.7	1.4	20	30	0.6-2.0	200	1000
HSE19-FC	1.90	1.99	100	180	0.8	1.6	20	35	0.6-2.4	200	1000
HSE20-FC	2.00	2.09	140	220	0.8	2.0	20	35	0.5-1.0	200	1000
HSE21-FC	2.10	2.19	200	300	0.8	2.5	20	40	0.6-2.8	200	1000
HSE22-FC	2.20	2.29	200	300	0.8	2.5	20	40	0.6-2.8	200	1000
HSE23-FC	2.30	2.37	200	340	0.8	1.4	20	30	1.2-2.8	200	1000

Model	Peak emission wavelength, $\mu\text{m}$		FWHM of the emission band, nm		Power, $\mu\text{W}$				Voltage, V	Maximum operating current, mA	
					QCW mode *		Pulse mode **			QCW mode	Pulse mode
	min	max	min	max	min	max	min	max			
HSE34	3.30	3.49	400	600	25	45	320	480	0.2-0.5	250	2000
HSE34H	3.30	3.49	400	500	45	80	480	720	0.2-0.5	250	2000
HSE38	3.70	3.94	500	700	20	40	180	220	0.5-0.8	250	2000
HSE41	3.95	4.09	700	1000	15	30	180	220	0.5-0.7	250	2000
HSE43	4.10	4.30	700	1000	8	12	180	220	0.2-0.8	250	2000
HSE46	4.40	4.60	700	1100	2	4	100	140	1.5-3.0	250	2000

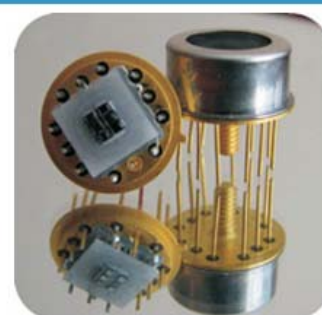
## TO-18



## TO5 (TO39)



## TO8



## SMD type packages



(SMD 3x3 mm)



(SMD 5x5 mm)



(SMD 5x5 mm with



(SMD 5x5 mm)