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Short-Form Catalog
2014/2015

Light is OSRAM

OSRAM
Opto Semiconductors

Infrared Emitters, Detectors and Sensors

Radial

Package	Type	λ_{peak} (typ) [nm]	Half angle φ (typ) [°]	I_e [mW/sr]	Φ_e (typ) [mW]	Measure-ment cond.	Package size
 Radial 3 mm	**SFH 4356**	860	± 20	90 (≥ 40)	80	I_F= 100 mA, t_p= 20 ms	L = 3.8 mm , W = 3.8 mm , H = 3.9 mm
 Radial 3 mm	**SFH 4356P**	860	± 70	12 (≥ 6.3)	70	I_F= 100 mA, t_p= 20 ms	L = 3.8 mm , W = 3.8 mm , H = 2.8 mm
 Radial 3 mm	**SFH 4346**	950	± 20	90 (≥ 40)	80	I_F= 100 mA, t_p= 20 ms	L = 3.8 mm , W = 3.8 mm , H = 3.9 mm
 Radial 3 mm	**SFH 4350**	860	± 13	200 (≥ 63)	70	I_F= 100 mA, t_p= 20 ms	L = 3.8 mm , W = 3.8 mm , H = 4.85 mm
 Radial 3 mm	**SFH 4341**	950	± 11	80 (≥ 25)	40	I_F = 70 mA, t_p= 20 ms	L = 3.8 mm , W = 3.8 mm , H = 4.85 mm
 Radial 5 mm	**SFH 4554**	860	± 10	550 (≥ 250)	75	I_F= 100 mA, t_p= 20 ms	L = 5.5 mm , W = 5.5 mm , H = 8.2 mm
 Radial 5 mm	**SFH 4556**	860	± 20	145 (≥ 63)	60	I_F= 100 mA, t_p= 20 ms	L = 5.5 mm , W = 5.5 mm , H = 7.7 mm
 Radial 5 mm	**SFH 4556P**	860	± 60	12 (≥ 6.3)	70	I_F= 100 mA, t_p= 20 ms	L = 5.7 mm , W = 5.7 mm , H = 4.6 mm
 Radial 5 mm	**SFH 4544**	950	± 10	550 (≥ 250)	75	I_F= 100 mA, t_p= 20 ms	L = 5.5 mm , W = 5.5 mm , H = 8.2 mm

Package	Type	λ_{peak} (typ) [nm]	Half angle φ (typ) [°]	I_e [mW/sr]	Φ_e (typ) [mW]	Measure-ment cond.	Package size
 Radial 5 mm	**SFH 4546**	950	± 20	130 (≥ 63)	55	I_F= 100 mA, t_p= 20 ms	L = 5.5 mm , W = 5.5 mm , H = 7.7 mm
 Radial 5 mm	**SFH 4550**	860	± 3	1100 (≥ 630)	70	I_F= 100 mA, t_p= 20 ms	L = 5.7 mm , W = 5.7 mm , H = 8.6 mm
 Radial 5 mm	**SFH 4555**	860	± 5	550 (≥ 160)	60	I_F= 100 mA, t_p= 20 ms	L = 5.5 mm , W = 5.5 mm , H = 7.9 mm
 Radial 5 mm	**SFH 4557**	860	± 30	55 (≥ 25)	60	I_F= 100 mA, t_p= 20 ms	L = 5.5 mm , W = 5.5 mm , H = 6.6 mm
 Radial 5 mm	**SFH 4545**	950	± 5	550 (≥ 250)	55	I_F= 100 mA, t_p= 20 ms	L = 5.5 mm , W = 5.5 mm , H = 7.9 mm
 Radial 5 mm	**SFH 4547**	950	± 30	50 (≥ 25)	55	I_F= 100 mA, t_p= 20 ms	L = 5.5 mm , W = 5.5 mm , H = 6.6 mm
 Sidelooker	**IRL 81A**	860	± 12	25 (≥ 6.3)	12	I_F = 20 mA, t_p = 20 ms	L = 4.5 mm , W = 5.7 mm , H = 2.3 mm
 Sidelooker	**SFH 4141**	950	± 6	40 (≥ 16)	8	I_F = 20 mA, t_p = 20 ms	L = 3.0 mm , W = 4.0 mm , H = 2.9 mm

Package	Type	λ_{peak} (typ) [nm]	Half angle φ (typ) [°]	I_e [mW/sr]	Φ_e (typ) [mW]	Measure-ment cond.	Package size
 SMR 5 mm	**SFH 4551**	860	± 10	270 (≥ 100)	70	I_F= 100 mA, t_p= 20 ms	L = 5.7 mm , W = 4.6 mm , H = 7.4 mm
 SMR 5 mm	**SFH 4558**	860	± 10	350 (≥ 160)	80	I_F= 100 mA, t_p= 20 ms	L = 5.7 mm , W = 4.6 mm , H = 7.4 mm
 SMR 5 mm	**SFH 4542**	950	± 10	230 (≥ 100)	65	I_F= 100 mA, t_p= 20 ms	L = 5.7 mm , W = 4.6 mm , H = 7.4 mm
 SMR 5 mm	**SFH 4543**	950	± 10	230 (≥ 100)	65	I_F= 100 mA, t_p= 20 ms	L = 5.7 mm , W = 4.6 mm , H = 7.4 mm

Metal Can + Array

Package	Type	λ_{peak} (typ) [nm]	Half angle φ (typ) [°]	I_e [mW/sr]	Φ_e (typ) [mW]	Measure-ment cond.	Package size
 Metal Can	**SFH 4845**	950	± 8	145 (≥ 63)	35	I_F= 100 mA, t_p= 20 ms	L = 5.4 mm , W = 5.4 mm , H = 7.3 mm
 Metal Can	**SFH 4846**	950	± 20	50 (≥ 25)	35	I_F= 100 mA, t_p= 20 ms	L = 5.4 mm , W = 5.4 mm , H = 6 mm
 Metal Can	**SFH 464 E7800**	660	± 23	1.5 (≥ 1)	11	I_F = 50 mA, t_p = 20 ms	L = 5.4 mm , W = 5.4 mm , H = 3.3 mm
 Metal Can	**SFH 4855**	860	± 8	110 (≥ 63)	35	I_F= 100 mA, t_p= 20 ms	L = 5.4 mm , W = 5.4 mm , H = 7.3 mm
 Metal Can	**SFH 4857**	860	± 20	35 (≥ 16)	35	I_F= 100 mA, t_p= 20 ms	L = 5.4 mm , W = 5.4 mm , H = 5.35 mm
 Metal Can	**SFH 4850 E7800**	860	± 20	12 (≥ 6.3)	80	I_F= 100 mA, t_p= 20 ms	L = 5.4 mm , W = 5.4 mm , H = 3.2 mm

Package	Type	λ_{peak} (typ) [nm]	Half angle φ (typ) [°]	I_e [mW/sr]	Φ_e (typ) [mW]	Measure-ment cond.	Package size
 Metal Can	**SFH 4860**	660	± 50	1.3 (≥ 0.63)	3	I_F = 50 mA, t_p = 20 ms	L = 5.4 mm , W = 5.4 mm , H = 3.75 mm
 Metal Can	**SFH 4851**	860	± 3	500 (≥ 160)	25	I_F= 100 mA, t_p= 20 ms	L = 5.5 mm , W = 5.5 mm , H = 5.8 mm
 Metal Can	**SFH 4853**	860	± 32	25 (≥ 10)	40	I_F= 100 mA, t_p= 20 ms	L = 5.5 mm , W = 5.5 mm , H = 3.65 mm
 Array	**SFH 4941C**	950	± 10	35 (≥ 16)	20	I_F = 30 mA, t_p = 20 ms	L = 2.5 mm , W = 1.1 mm , H = 3.5 mm

CHIPLED

Package	Type	λ_{peak} (typ) [nm]	Half angle φ (typ) [°]	I_e [mW/sr]	Φ_e (typ) [mW]	Measure-ment cond.	Package size
 SmartLED	**SFH 4050**	860	± 80	9 (≥ 4)	60	I_F = 100 mA, t_p= 20 ms	L = 1.7 mm , W = 0.8 mm , H = 0.65 mm
 CHIPLED	**SFH 4052**	860	± 40	20 (≥ 10)	40	I_F=70 mA, t_p = 20 ms	L = 3.2 mm , W = 1.6 mm , H = 1.1 mm
 CHIPLED	**SFH 4053**	860	± 70	7 (≥ 4)	35	I_F=70 mA, t_p=20 ms	L = 1.0 mm , W = 0.5 mm , H = 0.45 mm
 CHIPLED	**SFH 4043**	950	± 70	6 (≥ 2.5)	35	I_F=70 mA, t_p=20 ms	L = 1.0 mm , W = 0.5 mm , H = 0.45 mm
 CHIPLED	**SFH 4046**	950	± 22	30 (≥ 16)	40	I_F=70 mA, t_p=20 ms	L = 3.2 mm , W = 1.6 mm , H = 1 mm
 CHIPLED	**SFH 4056**	860	± 22	35 (≥ 16)	40	I_F=70 mA, t_p=20 ms	L = 3.2 mm , W = 1.6 mm , H = 1 mm

Package	Type	λ_{peak} (typ) [nm]	Half angle φ (typ) [°]	I_e [mW/sr]	Φ_e (typ) [mW]	Measure-ment cond.	Package size
 CHIPLED	**SFH 4059**	860	± 10	100	40	I_F=70 mA, t_p= 20 ms	L = 3.2 mm , W = 1.6 mm , H = 1.85 mm
 CHIPLED	**SFH 4059S**	860	± 15	95	50	I_F=50 mA, t_p= 20 ms	L = 3.2 mm , W = 1.6 mm , H = 1.85 mm
 CHIPLED	**SFH 4059SR**	860	± 15	95	50	I_F=50 mA, t_p= 20 ms	L = 3.2 mm , W = 1.6 mm , H = 1.85 mm
 CHIPLED	**SFH 4045N**	950	± 9	90 (≥ 40)	40	I_F = 70 mA, t_p= 20 ms	L = 3.0 mm , W = 1.2 mm , H = 1.1 mm

Pre-Molded

Package	Type	λ_{peak} (typ) [nm]	Half angle φ (typ) [°]	I_e [mW/sr]	Φ_e (typ) [mW]	Measure-ment cond.	Package size
 Mini TOPLED	**SFH 4247**	950	± 65	10 (≥ 4)	35	I_F = 70 mA, t_p = 20 ms	L = 2.2 mm , W = 1.4 mm , H = 1.3 mm
 Micro SIDELED	**SFH 4254**	860	± 60	12 (≥ 6.3)	40	I_F = 70 mA, t_p = 20 ms	L = 1.2 mm , W = 3.0 mm , H = 1.1 mm
 SIDELED	**SFH 4244**	950	± 60	11 (≥ 4)	35	I_F = 70 mA, t_p = 20 ms	L = 4.0 mm , W = 4.0 mm , H = 3.6 mm
 SIDELED	**SFH 4255**	860	± 60	20 (≥ 10)	60	I_F= 100 mA, t_p= 20 ms	L = 4.0 mm , W = 4.0 mm , H = 3.6 mm
 SIDELED	**SFH 4256**	860	± 60	13 (≥ 6.3)	40	I_F = 70 mA, t_p = 20 ms	L = 4.0 mm , W = 4.0 mm , H = 3.6 mm
 TOPLED	**SFH 4253**	860	± 60	13 (≥ 6.3)	40	I_F = 70 mA, t_p = 20 ms	L = 3.5 mm , W = 2.8 mm , H = 1.9 mm
 TOPLED	**SFH 4253 R**	860	± 60	13 (≥ 6.3)	40	I_F = 70 mA, t_p = 20 ms	L = 5.2 mm , W = 2.8 mm , H = 1.9 mm
 TOPLED	**SFH 4257**	860	± 60	9 (≥ 6.3)	25	I_F= 100 mA, t_p= 20 ms	L = 3.5 mm , W = 2.8 mm , H = 1.9 mm

Package	Type	λ_{peak} (typ) [nm]	Half angle φ (typ) [°]	I_e [mW/sr]	Φ_e (typ) [mW]	Measure-ment cond.	Package size
 TOPLED	**SFH 4257R**	860	± 60	9 (≥ 6.3)	25	I_F= 100 mA, t_p= 20 ms	L = 5.2 mm , W = 2.8 mm , H = 1.9 mm
 TOPLED	**SFH 4243**	950	± 60	11 (≥ 4)	35	I_F = 70 mA, t_p = 20 ms	L = 3.5 mm , W = 2.8 mm , H = 1.9 mm
 Power TOPLED	**SFH 4250**	860	± 60	20 (≥ 10)	60	I_F= 100 mA, t_p= 20 ms	L = 3.5 mm , W = 2.8 mm , H = 1.9 mm
 Power TOPLED	**SFH 4250S**	860	± 60	22 (≥ 12.5)	70	I_F=70 mA, t_p=20 ms	L = 3.5 mm , W = 2.8 mm , H = 1.9 mm
 Power TOPLED	**SFH 4258**	860	± 15	110 (≥ 50)	70	I_F= 100 mA, t_p= 20 ms	L = 3.5 mm , W = 2.8 mm , H = 3.8 mm
 Power TOPLED	**SFH 4258S**	860	± 15	130 (≥ 63)	80	I_F=70 mA, t_p=20 ms	L = 3.5 mm , W = 2.8 mm , H = 3.8 mm
 Power TOPLED	**SFH 4259**	860	± 25	55 (≥ 32)	70	I_F= 100 mA, t_p= 20 ms	L = 3.5 mm , W = 2.8 mm , H = 3.5 mm
 Power TOPLED	**SFH 4259S**	860	± 25	60 (≥ 25)	80	I_F=70 mA, t_p=20 ms	L = 3.5 mm , W = 2.8 mm , H = 3.5 mm

Package	Type	λ_{peak} (typ) [nm]	Half angle φ (typ) [°]	I_e [mW/sr]	Φ_e (typ) [mW]	Measure-ment cond.	Package size
 Power TOPLED	**SFH 4240**	950	± 60	18 (≥ 10)	55	I_F= 100 mA, t_p= 20 ms	L = 3.5 mm , W = 2.8 mm , H = 1.9 mm
 Power TOPLED	**SFH 4248**	950	± 15	100 (≥ 40)	65	I_F= 100 mA, t_p= 20 ms	L = 3.5 mm , W = 2.8 mm , H = 3.8 mm
 Power TOPLED	**SFH 4249**	950	± 25	50 (≥ 25)	65	I_F= 100 mA, t_p= 20 ms	L = 3.5 mm , W = 2.8 mm , H = 3.5 mm
 Multi TOPLED	**SFH 7250**	860	± 60	10 (≥ 6.3)	40	I_F = 70 mA, t_p = 20 ms	L = 3.5 mm , W = 2.8 mm , H = 1.9 mm
 Multi TOPLED	**SFH 7251**	860	± 60	12 (≥ 6.3)	40	I_F = 70 mA, t_p = 20 ms	L = 3.5 mm , W = 2.8 mm , H = 1.9 mm

Package	Type	λ_{peak}	I_V	V_F	Half angle	Spectral range	I_v	t_r, t_f	V_{CE}	Radiant sensitive area	Package size
		(typ)	(min)	(typ (max))	φ (typ)	(typ)		(typ)	(max.)	(typ.)	
		[nm]	[mcd]	[V]	[°]	[nm]	[mcd]	[µs]	[V]	[mm^2]	
 Multi TOPLED	**SFH 331-JK**	635	6 (4 ... 12.5)	2 (≤ 2.6)	± 60	typ 440 ... 1150		7	35	0.038	L = 3.5 mm , W = 2.8 mm , H = 1.9 mm
 Multi TOPLED	**SFH 7225**	591		2 (≤ 2.6)	± 60		63 ... 200		35	0.038	L = 3.5 mm , W = 2.8 mm , H = 1.9 mm

MIDLED

Package	Type	λ_{peak} (typ) [nm]	Half angle φ (typ) [°]	I_e [mW/sr]	Φ_e (typ) [mW]	Measure-ment cond.	Package size
 Mini MIDLED	**SFH 4451**	860	± 17	70 (≥ 25)	55	I_F = 100 mA, t_p = 20 ms	L = 2.3 mm , W = 2.0 mm , H = 0.9 mm
 Mini MIDLED	**SFH 4441**	950	± 17	65 (≥ 25)	50	I_F = 100 mA, t_p = 20 ms	L = 2.3 mm , W = 2.0 mm , H = 0.9 mm
 T-MIDLED	**SFH 4140**	950	± 25	50 (≥ 25)	55	I_F = 100 mA, t_p = 20 ms	L = 3.1 mm , W = 1.5 mm , H = 1.5 mm
 MIDLED	**SFH 4651**	860	± 10	60 (≥ 25)	40	I_F = 70 mA, t_p = 20 ms	L = 3.1 mm , W = 2.3 mm , H = 1.6 mm
 MIDLED	**SFH 4656**	860	± 10	60 (≥ 25)	40	I_F = 70 mA, t_p = 20 ms	L = 3.1 mm , W = 2.3 mm , H = 1.6 mm
 MIDLED	**SFH 4641**	950	± 10	55 (≥ 16)	35	I_F = 70 mA, t_p = 20 ms	L = 3.1 mm , W = 2.3 mm , H = 1.6 mm
 MIDLED	**SFH 4646**	950	± 10	55 (≥ 16)	35	I_F = 70 mA, t_p = 20 ms	L = 3.1 mm , W = 2.3 mm , H = 1.6 mm

Package	Type	λ_{peak} (typ) [nm]	Half angle φ (typ) [°]	I_e [mW/sr]	Φ_e (typ) [mW]	Measure-ment cond.	Package size
 MIDLED	**SFH 4650**	860	± 15	80 (≥ 25)	60	I_F= 100 mA, t_p= 20 ms	L = 3.1 mm , W = 2.3 mm , H = 1.6 mm
 MIDLED	**SFH 4655**	860	± 15	80 (≥ 25)	60	I_F= 100 mA, t_p= 20 ms	L = 3.1 mm , W = 2.3 mm , H = 1.6 mm
 MIDLED	**SFH 4640**	950	± 15	70 (≥ 25)	55	I_F= 100 mA, t_p= 20 ms	L = 3.1 mm , W = 2.3 mm , H = 1.6 mm
 MIDLED	**SFH 4645**	950	± 15	70 (≥ 25)	55	I_F= 100 mA, t_p= 20 ms	L = 3.1 mm , W = 2.3 mm , H = 1.6 mm

DRAGON

Package	Type	λ_{peak} (typ) [nm]	Half angle φ (typ) [°]	I_e [mW/sr]	Φ_e (typ) [mW]	Measure-ment cond.	Package size
 IR Golden DRAGON	**SFH 4232A**	860	± 60	205	530	I_F = 1 A, t_p = 100 µs	L = 11.0 mm, W = 6.0 mm, H = 1.8 mm
 IR Platinum DRAGON	**SFH 4235**	860	± 60	320	950	I_F = 1 A, t_p = 100 µs	L = 11.0 mm, W = 6.0 mm, H = 1.8 mm
 IR DRAGON Dome	**SFH 4783**	860	± 12	2300 (≥ 1250)	430	I_F= 1 A, t_p= 10 ms	L = 11.0 mm, W = 6.0 mm, H = 5.7 mm

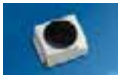
OSLON

Package	Type	λ_{peak} (typ) [nm]	Half angle φ (typ) [°]	I_e [mW/sr]	Φ_e (typ) [mW]	Measure-ment cond.	Package size
 IR OSLON Compact	**SFH 4710**	860	± 65	63	270	I_F = 500 mA, t_p = 100 µs	L = 1.6 mm , W = 0.8 mm , H = 1.2 mm
 IR OSLON	**SFH 4715A**	860	± 45	430 (≥ 250)	800	I_F = 1 A, t_p = 10 ms	L = 3.9 mm , W = 3.9 mm , H = 2.29 mm
 IR OSLON	**SFH 4715S**	860	± 45	440 (≥ 320)	1030	I_F=1 A, t_p=10 ms	L = 3.9 mm , W = 3.9 mm , H = 2.29 mm
 IR OSLON	**SFH 4716A**	860	± 75	170 (≥ 100)	760	I_F = 1 A, t_p = 10 ms	L = 3.9 mm , W = 3.9 mm , H = 1.51 mm
 IR OSLON	**SFH 4716S**	860	± 75	225 (≥ 160)	1030	I_F=1 A, t_p=10 ms	L = 3.9 mm , W = 3.9 mm , H = 1.51 mm
 IR OSLON	**SFH 4725S**	950	± 45	425 (≥ 320)	990	I_F=1 A, t_p=10 ms	L = 3.9 mm , W = 3.9 mm , H = 2.29 mm
 IR OSLON	**SFH 4726S**	950	± 75	215 (≥ 160)	990	I_F=1 A, t_p=10 ms	L = 3.9 mm , W = 3.9 mm , H = 1.51 mm

OSRAM OSTAR

Package	Type	λ_{peak}	Half angle	I_e	Φ_e	Measure-ment cond.	Package size
		(typ)	φ (typ)		(typ)		
		[nm]	[°]	[mW/sr]	[W]		
 IR OSRAM OSTAR Lighting	**SFH 4750**	860	± 70	1000 (≥ 630)	3.5	I_F=1 A, t_p=20 ms	L = 23.0 mm , W = 19.9 mm , H = 3.25 mm

Phototransistors
SMT Transistors

Package	Type	Radiant sensitive area	Half angle	I_{PCE}	Measurement cond.	V_{CE}	t_r, t_f	Package size
			φ (typ)			(max.)	(typ)	
		[mm^2]	[°]	[µA]		[V]	[µs]	
 SmartLED	**SFH 3010**	0.04	± 80	≥ 25	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	15	7	L = 1.3 mm , W = 0.8 mm , H = 0.65 mm
 CHIPLED	**SFH 3015 FA**	0.04	± 13	160 ... 800	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	15	7	L = 3.2 mm , W = 2.5 mm , H = 1.6 mm
 TOPLED	**SFH 320**	0.038	± 60	16 ... 80	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	7	L = 3.5 mm , W = 2.8 mm , H = 1.9 mm
	SFH 320-3	0.038	± 60	25 ... 50	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	7	L = 3.5 mm , W = 2.8 mm , H = 1.9 mm
	SFH 320-3/4	0.038	± 60	25 ... 80	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	7.5	L = 3.5 mm , W = 2.8 mm , H = 1.9 mm
	SFH 320-4	0.038	± 60	40 ... 80	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	8	L = 3.5 mm , W = 2.8 mm , H = 1.9 mm
 TOPLED	**SFH 320 FA**	0.038	± 60	16 ... 80	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	7	L = 3.5 mm , W = 2.8 mm , H = 1.9 mm
	SFH 320 FA-3	0.038	± 60	25 ... 50	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	7	L = 3.5 mm , W = 2.8 mm , H = 1.9 mm
	SFH 320 FA-3/4	0.038	± 60	25 ... 80	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	7.5	L = 3.5 mm , W = 2.8 mm , H = 1.9 mm
	SFH 320 FA-4	0.038	± 60	40 ... 80	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	8	L = 3.5 mm , W = 2.8 mm , H = 1.9 mm

Package	Type	Radiant sensitive area	Half angle	I_{PCE}	Measurement cond.	V_{CE}	t_r, t_f	Package size
			φ (typ)			(max.)	(typ)	
		[mm^2]	[°]	[µA]		[V]	[µs]	
 TOPLED	**SFH 3201**	0.55	± 60	63 ... 320	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	20	24	L = 6.0 mm , W = 4.0 mm , H = 1.9 mm
	SFH 3201-2/ 3	0.55	± 60	100 ... 320	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	20	29	L = 6.0 mm , W = 4.0 mm , H = 1.9 mm
	SFH 3201-3	0.55	± 60	160 ... 320	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	20	34	L = 6.0 mm , W = 4.0 mm , H = 1.9 mm
 MICRO SIDELED	**SFH 3204**	0.04	± 60	≥ 32	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	15	7	L = 3.0 mm , W = 1.2 mm , H = 1.1 mm
 TOPLED	**SFH 3211 FA**	0.038	± 60	16 ... 80	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	7	L = 5.2 mm , W = 2.8 mm , H = 1.9 mm
	SFH 3211 FA-3/4	0.038	± 60	25 ... 80	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	7.5	L = 5.2 mm , W = 2.8 mm , H = 1.9 mm
 TOPLED	**SFH 3219**	0.038	± 25	≥ 63	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	7	L = 3.5 mm , W = 2.8 mm , H = 3.35 mm
 SIDELED	**SFH 325**	0.038	± 60	16 ... 80	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	7	L = 4.0 mm , W = 3.6 mm , H = 4 mm
	SFH 325-3	0.038	± 60	25 ... 50	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	7	L = 4.0 mm , W = 3.6 mm , H = 4 mm
	SFH 325-3/4	0.038	± 60	25 ... 80	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	7.5	L = 4.0 mm , W = 3.6 mm , H = 4 mm
	SFH 325-4	0.038	± 60	40 ... 80	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	8	L = 4.0 mm , W = 3.6 mm , H = 4 mm

Package	Type	Radiant sensitive area	Half angle	I_{PCE}	Measurement cond.	V_{CE}	t_r, t_f	Package size
			φ (typ)			(max.)	(typ)	
		[mm^2]	[°]	[µA]		[V]	[µs]	
 SIDELED	**SFH 325 FA**	0.038	± 60	16 ... 80	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	7	L = 4.0 mm , W = 3.6 mm , H = 4 mm
	SFH 325 FA-3	0.038	± 60	25 ... 50	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	7	L = 4.0 mm , W = 3.6 mm , H = 4 mm
	SFH 325 FA-3/4	0.038	± 60	25 ... 80	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	7.5	L = 4.0 mm , W = 3.6 mm , H = 4 mm
	SFH 325 FA-4	0.038	± 60	40 ... 80	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	8	L = 4.0 mm , W = 3.6 mm , H = 4 mm
 Smart DIL	**SFH 3400**	0.55	± 60	63 ... 320	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	20	24	L = 4.6 mm , W = 2.0 mm , H = 1.05 mm
	SFH 3400-2/3	0.55	± 60	100 ... 320	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	20	29	L = 4.6 mm , W = 2.0 mm , H = 1.05 mm
 Smart DIL	**SFH 3410**	0.29	± 60	3.2 ... 25	E_v = 20 lx, Std. Light A, V_{CE} = 5 V	5.5		L = 4.6 mm , W = 2.0 mm , H = 1.05 mm
	SFH 3410-1/2	0.29	± 60	3.2 ... 10	E_v = 20 lx, Std. Light A, V_{CE} = 5 V	5.5		L = 4.6 mm , W = 2.0 mm , H = 1.05 mm
	SFH 3410-2/3	0.29	± 60	5 ... 16	E_v = 20 lx, Std. Light A, V_{CE} = 5 V	5.5		L = 4.6 mm , W = 2.0 mm , H = 1.05 mm
	SFH 3410-3/4	0.29	± 60	8 ... 25	E_v = 20 lx, Std. Light A, V_{CE} = 5 V	5.5		L = 4.6 mm , W = 2.0 mm , H = 1.05 mm

Package	Type	Radiant sensitive area	Half angle	I_{PCE}	Measurement cond.	V_{CE}	t_r, t_f	Package size
			φ (typ)			(max.)	(typ)	
		[mm²]	[°]	[µA]		[V]	[µs]	
 CHIPLED	**SFH 3710**	0.29	± 60	2.5 ... 12.5	λ = 560 nm, E_e = 10 µW/cm², V_{CE} = 5 V	5.5		L = 2.0 mm , W = 1.3 mm , H = 0.8 mm
	SFH 3710-2/3	0.29	± 60	2.5 ... 8	λ = 560 nm, E_e = 10 µW/cm², V_{CE} = 5 V	5.5		L = 2.0 mm , W = 1.3 mm , H = 0.8 mm
	SFH 3710-3/4	0.29	± 60	4 ... 12.5	λ = 560 nm, E_e = 10 µW/cm², V_{CE} = 5 V	5.5		L = 2.0 mm , W = 1.3 mm , H = 0.8 mm
 CHIPLED	**SFH 3711**	0.29	± 60	16 ... 80	E_v = 1000 lx, (white LED), V_{CE} = 5 V	5.5		L = 2.0 mm , W = 1.3 mm , H = 0.8 mm
	SFH 3711-1/2	0.29	± 60	16 ... 50	E_v = 1000 lx, (white LED), V_{CE} = 5 V	5.5		L = 2.0 mm , W = 1.3 mm , H = 0.8 mm
	SFH 3711 - 2/3	0.29	± 60	25 ... 80	E_v = 1000 lx, (white LED), V_{CE} = 5 V	5.5		L = 2.0 mm , W = 1.3 mm , H = 0.8 mm

Package	Type	λ_{peak}	I_V	V_F	Half angle	Spectral range	I_v	t_r, t_f	V_{CE}	Radiant sensitive area	Package size
		(typ)	(min)	(typ (max))	φ (typ)	(typ)		(typ)	(max.)	(typ.)	
		[nm]	[mcd]	[V]	[°]	[nm]	[mcd]	[µs]	[V]	[mm²]	
 Multi TOPLED	**SFH 331-JK**	635	6 (4 ... 12.5)	2 (≤ 2.6)	± 60	typ 440 ... 1150		7	35	0.038	L = 3.5 mm , W = 2.8 mm , H = 1.9 mm
 Multi TOPLED	**SFH 7225**	591		2 (≤ 2.6)	± 60		63 ... 200		35	0.038	L = 3.5 mm , W = 2.8 mm , H = 1.9 mm

Phototransistors

SMT Transistors in low profile, narrow angle MIDLED package

Package	Type	Radiant sensitive area	Half angle	I_{PCE}	Measurement cond.	V_{CE}	t_r, t_f	Package size
			φ (typ)			(max.)	(typ)	
		[mm^2]	[°]	[µA]		[V]	[µs]	
 MIDLED	**SFH 3600**	0.04	± 20	100 ... 500	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	45	L = 3.1 mm , W = 2.3 mm , H = 1.6 mm
	SFH 3600-2/ 3	0.04	± 20	100 ... 320	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	37	L = 3.1 mm , W = 2.3 mm , H = 1.6 mm
	SFH 3600-3/ 4	0.04	± 20	160 ... 500	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	57	L = 3.1 mm , W = 2.3 mm , H = 1.6 mm
 MIDLED	**SFH 3605**	0.04	± 20	100 ... 500	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	45	L = 3.1 mm , W = 1.6 mm , H = 2.25 mm
	SFH 3605-2/ 3	0.04	± 20	100 ... 320	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	37	L = 3.1 mm , W = 1.6 mm , H = 2.25 mm
	SFH 3605-3/ 4	0.04	± 20	160 ... 500	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	57	L = 3.1 mm , W = 1.6 mm , H = 2.25 mm

Phototransistors

Phototransistors in metal package

Package	Type	Radiant sensitive area	Half angle	I_{PCE}	Measurement cond.	V_{CE}	t_r, t_f	Package size
			φ (typ)			(max.)	(typ)	
		[mm^2]	[°]	[µA]		[V]	[µs]	
 Metal Can	**BP 103**	0.11	± 55	> 80	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	8	L = 5.4 mm , W = 5.4 mm , H = 3.3 mm
	BP 103-3/4	0.11	± 55	125 ... 400	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	8	L = 5.4 mm , W = 5.4 mm , H = 3.3 mm
 Metal Can	**BPX 38**	0.675	± 40	≥ 200	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	50	12	L = 5.5 mm , W = 5.5 mm , H = 5.25 mm
	BPX 38-2/3	0.675	± 40	200 ... 630	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	50	11	L = 5.5 mm , W = 5.5 mm , H = 5.25 mm
	BPX 38-3	0.675	± 40	320 ... 630	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	50	12	L = 5.5 mm , W = 5.5 mm , H = 5.25 mm
	BPX 38-4	0.675	± 40	500 ... 1000	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	50	15	L = 5.5 mm , W = 5.5 mm , H = 5.25 mm

Package	Type	Radiant sensitive area	Half angle	I_{PCE}	Measurement cond.	V_{CE}	t_r, t_f	Package size
			φ (typ)			(max.)	(typ)	
		[mm^2]	[°]	[µA]		[V]	[µs]	
 Metal Can	**BPX 43**	0.675	± 15	≥ 800	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	50	14	L = 5.5 mm , W = 5.5 mm , H = 5.8 mm
	BPX 43-3/4	0.675	± 15	1250 ... 4000	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	50	14	L = 5.5 mm , W = 5.5 mm , H = 5.8 mm
	BPX 43-4	0.675	± 15	2000 ... 4000	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	50	15	L = 5.5 mm , W = 5.5 mm , H = 5.8 mm
	BPX 43-4/5	0.675	± 15	≥ 2000	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	50	17	L = 5.5 mm , W = 5.5 mm , H = 5.8 mm
	BPX 43-5	0.675	± 15	≥ 3200	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	50	18	L = 5.5 mm , W = 5.5 mm , H = 5.8 mm
 Metal Can	**BPY 62**	0.11	± 8	≥ 500	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	8	L = 5.5 mm , W = 5.5 mm , H = 5.8 mm
	BPY 62-3/4	0.11	± 8	800 ... 2500	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	8	L = 5.5 mm , W = 5.5 mm , H = 5.8 mm
	BPY 62-4	0.11	± 8	1250 ... 2500	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	9	L = 5.5 mm , W = 5.5 mm , H = 5.8 mm

Phototransistors

Phototransistors in plastic package

Package	Type	Radiant sensitive area	Half angle	I_{PCE}	Measurement cond.	V_{CE}	t_r, t_f	Package size
			φ (typ)			(max.)	(typ)	
		[mm^2]	[°]	[µA]		[V]	[µs]	
 Sidelooker	**LPT 80A**	0.11	± 35	≥ 250	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	30	10	L = 4.4 mm , W = 2.3 mm , H = 5.72 mm
 Radial 5 mm	**SFH 300**	0.11	± 25	≥ 630	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	10	L = 5.7 mm , W = 5.7 mm , H = 8.6 mm
	SFH 300-3/4	0.11	± 25	≥ 1000	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	10	L = 5.7 mm , W = 5.7 mm , H = 8.6 mm
 Radial 5 mm	**SFH 300 FA**	0.11	± 25	≥ 630	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	10	L = 5.7 mm , W = 5.7 mm , H = 8.6 mm
	SFH 300 FA-3/4	0.11	± 25	≥ 1000	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	10	L = 5.7 mm , W = 5.7 mm , H = 8.6 mm
 Radial 5 mm	**SFH 303 FA**	0.11	± 20	≥ 1000	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	13	L = 5.7 mm , W = 5.7 mm , H = 8.6 mm
	SFH 303 FA-3/4	0.11	± 20	≥ 1600	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	14	L = 5.7 mm , W = 5.7 mm , H = 8.6 mm

Package	Type	Radiant sensitive area	Half angle	I_{PCE}	Measurement cond.	V_{CE}	t_r, t_f	Package size
			φ (typ)			(max.)	(typ)	
		[mm^2]	[°]	[µA]		[V]	[µs]	
	**SFH 309**	0.038	± 12	400 ... 5000	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	7	L = 3.8 mm , W = 3.8 mm , H = 4.85 mm
Radial 3 mm	**SFH 309-3/4**	0.038	± 12	630 ... 2000	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	6.5	L = 3.8 mm , W = 3.8 mm , H = 4.85 mm
	SFH 309-4	0.038	± 12	1000 ... 2000	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	7	L = 3.8 mm , W = 3.8 mm , H = 4.85 mm
	SFH 309-4/5	0.038	± 12	1000 ... 3200	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	7.5	L = 3.8 mm , W = 3.8 mm , H = 4.85 mm
	SFH 309-5	0.038	± 12	1600 ... 3200	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	8	L = 3.8 mm , W = 3.8 mm , H = 4.85 mm
	SFH 309-5/6	0.038	± 12	1600 ... 5000	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	8.5	L = 3.8 mm , W = 3.8 mm , H = 4.85 mm
	**SFH 309 FA**	0.038	± 12	400 ... 5000	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	7	L = 3.8 mm , W = 3.8 mm , H = 4.85 mm
Radial 3 mm	**SFH 309 FA-3/4**	0.038	± 12	630 ... 2000	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	6.5	L = 3.8 mm , W = 3.8 mm , H = 4.85 mm
	SFH 309 FA-4	0.038	± 12	1000 ... 2000	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	7	L = 3.8 mm , W = 3.8 mm , H = 4.85 mm
	SFH 309 FA-4/5	0.038	± 12	1000 ... 3200	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	7.5	L = 3.8 mm , W = 3.8 mm , H = 4.85 mm
	SFH 309 FA-5	0.038	± 12	1600 ... 3200	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	8	L = 3.8 mm , W = 3.8 mm , H = 4.85 mm
	SFH 309 FA-5/6	0.038	± 12	1600 ... 5000	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	8.5	L = 3.8 mm , W = 3.8 mm , H = 4.85 mm
	**SFH 310**	0.11	± 25	630 ... 3200	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	9	L = 3.3 mm , W = 3.3 mm , H = 4.6 mm
Radial 3 mm	**SFH 310-2/3**	0.11	± 25	630 ... 2000	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	7.5	L = 3.3 mm , W = 3.3 mm , H = 4.6 mm

Package	Type	Radiant sensitive area	Half angle	I_{PCE}	Measurement cond.	V_{CE}	t_r, t_f	Package size
			φ (typ)			(max.)	(typ)	
		[mm^2]	[°]	[µA]		[V]	[µs]	
 Radial 3 mm	**SFH 310 FA**	0.11	± 25	400 ... 3200	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	9	L = 3.3 mm , W = 3.3 mm , H = 4.6 mm
	SFH 310 FA-2/3	0.11	± 25	630 ... 2000	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	7.5	L = 3.3 mm , W = 3.3 mm , H = 4.6 mm
 Sidelooker	**SFH 3100 F**	0.11	± 14	> 400	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	7	L = 3.0 mm , W = 2.9 mm , H = 4 mm
 Radial 5 mm	**SFH 313 FA**	0.55	± 10	≥ 2500	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	70	10	L = 5.7 mm , W = 5.7 mm , H = 8.6 mm
	SFH 313 FA-2/3	0.55	± 10	4000 ... 12500	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	70	11	L = 5.7 mm , W = 5.7 mm , H = 8.6 mm
	SFH 313 FA-3/4	0.55	± 10	≥ 6300	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	70	13	L = 5.7 mm , W = 5.7 mm , H = 8.6 mm
 Radial 5 mm	**SFH 314**	0.55	± 40	≥ 630	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	70	11	L = 5.7 mm , W = 5.7 mm , H = 6.5 mm
	SFH 314-2/3	0.55	± 40	1000 ... 3200	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	70	11	L = 5.7 mm , W = 5.7 mm , H = 6.5 mm
 Radial 5 mm	**SFH 314 FA**	0.55	± 40	≥ 630	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	70	11	L = 5.7 mm , W = 5.7 mm , H = 6.5 mm
	SFH 314 FA-2/3	0.55	± 40	1000 ... 3200	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	70	11	L = 5.7 mm , W = 5.7 mm , H = 6.5 mm
 Radial 3 mm	**SFH 3310**	0.29	± 75	2.5 ... 8	λ = 560 nm, E_e = 10 µW/cm^2, V_{CE} = 5 V	5.5		L = 3.8 mm , W = 3.8 mm , H = 2.8 mm

Phototransistors

Phototransistors in sidelooker package

Package	Type	Radiant sensitive area	Half angle	I_{PCE}	Measurement cond.	V_{CE}	t_r, t_f	Package size
			φ (typ)			(max.)	(typ)	
		[mm^2]	[°]	[µA]		[V]	[µs]	
 MIDLED	**SFH 3605**	0.04	± 20	100 ... 500	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	45	L = 3.1 mm , W = 1.6 mm , H = 2.25 mm
	SFH 3605-2/ 3	0.04	± 20	100 ... 320	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	37	L = 3.1 mm , W = 1.6 mm , H = 2.25 mm
	SFH 3605-3/ 4	0.04	± 20	160 ... 500	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	57	L = 3.1 mm , W = 1.6 mm , H = 2.25 mm
 SIDELED	**SFH 325**	0.038	± 60	16 ... 80	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	7	L = 4.0 mm , W = 3.6 mm , H = 4 mm
	SFH 325-3	0.038	± 60	25 ... 50	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	7	L = 4.0 mm , W = 3.6 mm , H = 4 mm
	SFH 325-3/4	0.038	± 60	25 ... 80	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	7.5	L = 4.0 mm , W = 3.6 mm , H = 4 mm
	SFH 325-4	0.038	± 60	40 ... 80	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	8	L = 4.0 mm , W = 3.6 mm , H = 4 mm

Package	Type	Radiant sensitive area	Half angle	I_{PCE}	Measurement cond.	V_{CE}	t_r, t_f	Package size
			φ (typ)			(max.)	(typ)	
		[mm^2]	[°]	[µA]		[V]	[µs]	
 SIDELED	**SFH 325 FA**	0.038	± 60	16 ... 80	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	7	L = 4.0 mm , W = 3.6 mm , H = 4 mm
	SFH 325 FA-3	0.038	± 60	25 ... 50	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	7	L = 4.0 mm , W = 3.6 mm , H = 4 mm
	SFH 325 FA-3/4	0.038	± 60	25 ... 80	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	7.5	L = 4.0 mm , W = 3.6 mm , H = 4 mm
	SFH 325 FA-4	0.038	± 60	40 ... 80	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	35	8	L = 4.0 mm , W = 3.6 mm , H = 4 mm
 Sidelooker	**LPT 80A**	0.11	± 35	≥ 250	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	30	10	L = 4.4 mm , W = 2.3 mm , H = 5.72 mm
 Sidelooker	**SFH 3100 F**	0.11	± 14	> 400	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	7	L = 3.0 mm , W = 2.9 mm , H = 4 mm
 MICRO SIDELED	**SFH 3204**	0.04	± 60	≥ 32	λ = 950 nm, E_e = 0.1 mW/cm^2, V_{CE} = 5 V	15	7	L = 3.0 mm , W = 1.2 mm , H = 1.1 mm

Phototransistors

Phototransistors in miniature array

Package	Type	Radiant sensitive area	Half angle	I_{PCE}	Measurement cond.	V_{CE}	t_r, t_f	Package size
			φ (typ)			(max.)	(typ)	
		[mm^2]	[°]	[µA]		[V]	[µs]	
 Array	**SFH 305**	0.11	± 16	250 ... 1250	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	32	6	L = 2.5 mm , W = 1.0 mm , H = 3.4 mm
	SFH 305-2/3	0.11	± 16	250 ... 800	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	32	6	L = 2.5 mm , W = 1.0 mm , H = 3.4 mm
 Array	**BPX 80**	0.11	± 18	> 320	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	6	
	BPX 82	0.11	± 18	> 320	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	6	
	BPX 83	0.11	± 18	> 320	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	6	
	BPX 84	0.11	± 18	> 320	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	6	
	BPX 85	0.11	± 18	> 320	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	6	
	BPX 86	0.11	± 18	> 320	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	6	
	BPX 87	0.11	± 18	> 320	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	6	
	BPX 88	0.11	± 18	> 320	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	6	
	BPX 89	0.11	± 18	> 320	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	6	

Package	Type	Radiant sensitive area	Half angle	I_{PCE}	Measurement cond.	V_{CE}	t_r, t_f	Package size
			φ (typ)			(max.)	(typ)	
		[mm^2]	[°]	[µA]		[V]	[µs]	
	**BPX 81**	0.11	± 18	> 250	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	7	L = 1.8 mm , W = 2.3 mm , H = 2.6 mm
Array	**BPX 81-2/3**	0.11	± 18	250 ... 800	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	7	L = 1.8 mm , W = 2.3 mm , H = 2.6 mm
	BPX 81-3	0.11	± 18	400 ... 800	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	7	L = 1.8 mm , W = 2.3 mm , H = 2.6 mm
	BPX 81-3/4	0.11	± 18	> 400	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	7	L = 1.8 mm , W = 2.3 mm , H = 2.6 mm
	BPX 81-4	0.11	± 18	> 630	λ = 950 nm, E_e = 0.5 mW/cm^2, V_{CE} = 5 V	35	7	L = 1.8 mm , W = 2.3 mm , H = 2.6 mm

Photodiodes
SMT PIN Photodiodes

Package	Type	Radiant sensitive area	Half angle	I_P	Measurement cond.	V_R	Spectral range	t_r, t_f	Package size
			φ (typ)			(max)	(typ)	(typ)	
		[mm^2]	[°]	[µA]		[V]	[nm]	[µs]	
 SMT DIL	**BP 104 S**	4.84	± 60	55 (≥ 40)	E_v = 1000 lx, Std. Light A, V_R = 5 V	20	400 ... 1100	0.02	L = 6.5 mm , W = 3.9 mm , H = 1.15 mm
 SMT DIL	**BP 104 SR**	4.84	± 60	55 (≥ 40)	E_v = 1000 lx, Std. Light A, V_R = 5 V	20	400 ... 1100	0.02	L = 6.5 mm , W = 3.9 mm , H = 1.15 mm
 SMT DIL	**BP 104 FS**	4.84	± 60	34 (≥ 25)	λ = 950 nm, E_e = 1 mW/ cm^2, V_R = 5 V	20	800 ... 1100	0.02	L = 6.5 mm , W = 3.9 mm , H = 1.15 mm
 SMT DIL	**BP 104 F**	4.84	± 60	34 (≥ 25)	λ = 950 nm, E_e = 1 mW/ cm^2, V_R = 5 V	20	800 ... 1100	0.02	L = 3.9 mm , W = 5.2 mm , H = 2.05 mm
 SMT DIL	**BP 104 FAS**	4.84	± 60	34 (≥ 25)	λ = 870 nm, E_e = 1 mW/ cm^2, V_R = 5 V	20	730 ... 1100	0.02	L = 6.5 mm , W = 3.9 mm , H = 1.15 mm
 SMT DIL	**BP 104 FASR**	4.84	± 60	34 (≥ 25)	λ = 870 nm, E_e = 1 mW/ cm^2, V_R = 5 V	20	730 ... 1100	0.02	L = 6.5 mm , W = 3.9 mm , H = 1.15 mm
 SMT DIL	**BPW 34 FS**	7.02	± 60	50 (≥ 40)	λ = 950 nm, E_e = 1 mW/ cm^2, V_R = 5 V	16	780 ... 1100	0.02	L = 6.5 mm , W = 3.9 mm , H = 1.15 mm
 SMT DIL	**BPW 34 FSR**	7.02	± 60	50 (≥ 40)	λ = 950 nm, E_e = 1 mW/ cm^2, V_R = 5 V	16	780 ... 1100	0.02	L = 6.5 mm , W = 3.9 mm , H = 1.15 mm

Package	Type	Radiant sensitive area	Half angle	I_P	Measurement cond.	V_R	Spectral range	t_r, t_f	Package size
			φ (typ)			(max)	(typ)	(typ)	
		[mm²]	[°]	[µA]		[V]	[nm]	[µs]	
 SMT DIL	**BPW 34 FAS**	7.02	± 60	50 (≥ 40)	λ = 870 nm, E_e = 1 mW/cm², V_R = 5 V	16	730 ... 1100	0.02	L = 6.5 mm , W = 3.9 mm , H = 1.15 mm
 SMT DIL	**BPW 34 FASR**	7.02	± 60	50 (≥ 40)	λ = 870 nm, E_e = 1 mW/cm², V_R = 5 V	16	730 ... 1100	0.02	L = 6.5 mm , W = 3.9 mm , H = 1.15 mm
 SMT DIL	**BPW 34 S**	7.02	± 60	80 (≥ 50)	E_v = 1000 lx, Std. Light A, V_R = 5 V	32	400 ... 1100	0.02	L = 6.5 mm , W = 3.9 mm , H = 1.15 mm
 SMT DIL	**BPW 34 SR**	7.02	± 60	80 (≥ 50)	E_v = 1000 lx, Std. Light A, V_R = 5 V	32	400 ... 1100	0.02	L = 6.5 mm , W = 3.9 mm , H = 1.15 mm
 SMT DIL	**KOM 2125**	4 (Diode A) 10 (Diode B)	± 60	40 (≥ 30) (Diode A) 100 (≥ 75) (Diode B)	E_v = 1000 lx, Std. Light A, V_R = 5 V	60	400 ... 1100	0.018	L = 8.4 mm , W = 4.4 mm , H = 1.15 mm
 Smart DIL	**SFH 2400**	1.00		10 (≥ 6)	V_R = 5 V, standard light A, E_v = 1000lx	20	380 ... 1100	0.005	L = 4.6 mm , W = 2.0 mm , H = 1.05 mm
 Smart DIL	**SFH 2400 FA**	1.00	± 60	6.2 (≥ 3.6)	V_R = 5 V, λ = 870 nm, E_e = 1 mW/cm²	20	750 ... 1100	0.005	L = 4.6 mm , W = 2.0 mm , H = 1.05 mm
 Smart DIL	**SFH 2400 FAR**	1.00	± 60	6.2 (≥ 3.6)	V_R = 5 V, λ = 870 nm, E_e = 1 mW/cm²	20	750 ... 1100	0.005	L = 4.6 mm , W = 2.0 mm , H = 1.05 mm

Package	Type	Radiant sensitive area	Half angle	I_P	Measurement cond.	V_R	Spectral range	t_r, t_f	Package size
			φ (typ)			(max)	(typ)	(typ)	
		[mm^2]	[°]	[µA]		[V]	[nm]	[µs]	
 SMT	**SFH 2430**	7.02	± 60			6	400 ... 900	200	L = 6.5 mm , W = 3.9 mm , H = 1.15 mm
 SMR 5 mm	**SFH 2500 FA**	1.00	± 15	70 (≥ 50)	λ = 870 nm, E_e = 1 mW/ cm^2, V_R = 5 V	20	750 ... 1100	0.005	L = 7.4 mm , W = 7.7 mm , H = 4.6 mm
 SMR 5 mm	**SFH 2505**	1.00	± 15	70 (≥ 50)	λ = 870 nm, E_e = 1 mW/ cm^2, V_R = 5 V	20	400 ... 1100	0.005	
 SMR 5 mm	**SFH 2505 FA**	1.00	± 15	70 (≥ 50)	λ = 870 nm, E_e = 1 mW/ cm^2, V_R = 5 V	20	750 ... 1100	0.005	L = 7.4 mm , W = 7.7 mm , H = 4.6 mm
 CHIPLED	**SFH 2701**	0.36	± 60	1.2	λ = 650 nm, E_e = 0.5 mW/ cm^2, V_R = 5 V	15	400 ... 1050		L = 3.2 mm , W = 1.5 mm , H = 1.09 mm

Photodiodes

PIN Photodiodes in through hole package

Package	Type	Radiant sensitive area	Half angle	I_P	Measurement cond.	V_R	Spectral range	t_r, t_f	Package size
			φ (typ)			(max)	(typ)	(typ)	
		[mm²]	[°]	[µA]		[V]	[nm]	[µs]	
 SMT DIL	**BP 104 F**	4.84	± 60	34 (≥ 25)	λ = 950 nm, E_e = 1 mW/cm², V_R = 5 V	20	800 ... 1100	0.02	L = 3.9 mm , W = 5.2 mm , H = 2.05 mm
 SMT DIL	**BPW 34**	7.02	± 60	80 (≥ 50)	E_v = 1000 lx, Std. Light A, V_R = 5 V	32	400 ... 1100	0.02	L = 5.2 mm , W = 3.9 mm , H = 2.05 mm
 SMT DIL	**BPW 34 F**	7.02	± 60	50 (≥ 40)	λ = 950 nm, E_e = 1 mW/cm², V_R = 5 V	16	780 ... 1100	0.02	L = 5.2 mm , W = 3.9 mm , H = 2.05 mm
 SMT DIL	**BPW 34 FA**	7.02	± 60	50 (≥ 40)	λ = 870 nm, E_e = 1 mW/cm², V_R = 5 V	16	730 ... 1100	0.02	L = 5.2 mm , W = 3.9 mm , H = 2.05 mm
 Metal Can	**BPX 65**	1.00	± 40	10 (≥ 5.5)	E_v = 1000 lx, Std. Light A, V_R = 5 V	20	350 ... 1100	0.012	L = 5.5 mm , W = 5.5 mm , H = 5.25 mm
 Radial 5 mm	**SFH 203 P**	1.00	± 75	9.5 (≥ 5)	V_R = 5 V, Std. Light A, E_V = 1000 lx (SFH 203 P) V_R = 5 V, λ = 870 nm, E_e = 1 mW/cm² (SFH 203 PFA)	20	400 ... 1100	0.005	L = 5.7 mm , W = 5.7 mm , H = 4.6 mm

Package	Type	Radiant sensitive area	Half angle	I_P	Measurement cond.	V_R	Spectral range	t_r, t_f	Package size
			φ (typ)			(max)	(typ)	(typ)	
		[mm^2]	[°]	[µA]		[V]	[nm]	[µs]	
 Radial 5 mm	**SFH 203 PFA**	1.00	± 75	6.2 (≥ 3.6)	V_R = 5 V, Std. Light A, E_V = 1000 lx (SFH 203 P) V_R = 5 V, λ = 870 nm, E_e = 1 mW/cm^2 (SFH 203 PFA)	20	750 ... 1100	0.005	L = 5.7 mm , W = 5.7 mm , H = 4.6 mm
 Radial 5 mm	**SFH 203**	1.00	± 20	80 (≥ 50)	V_R = 5 V, Std. Light A, E_V = 1000 lx (SFH 203) V_R = 5 V, λ = 870 nm, E_e = 1 mW/cm^2 (SFH 203 FA)	20	400 ... 1100	0.005	L = 5.7 mm , W = 5.7 mm , H = 8.6 mm
 Radial 5 mm	**SFH 203 FA**	1.00	± 20	50 (≥ 30)	V_R = 5 V, Std. Light A, E_V = 1000 lx (SFH 203) V_R = 5 V, λ = 870 nm, E_e = 1 mW/cm^2 (SFH 203 FA)	20	750 ... 1100	0.005	L = 5.7 mm , W = 5.7 mm , H = 8.6 mm
 Sidelooker	**SFH 205 F**	7.02	± 60	60 (≥ 45)	λ = 950 nm, E_e = 1 mW/cm^2, V_R = 5 V	32	800 ... 1100	0.02	L = 4.9 mm , W = 3.9 mm , H = 6.6 mm
 Sidelooker	**SFH 205 FA**	7.02	± 60	60 (≥ 45)	λ = 870 nm, E_e = 1 mW/cm^2, V_R = 5 V	32	740 ... 1100	0.02	L = 4.9 mm , W = 3.9 mm , H = 6.6 mm
 Sidelooker	**SFH 206 K**	7.02	± 60			32	400 ... 1100	0.02	L = 4.9 mm , W = 3.9 mm , H = 6.6 mm

Package	Type	Radiant sensitive area	Half angle	I_P	Measurement cond.	V_R	Spectral range	t_r, t_f	Package size
			φ (typ)			(max)	(typ)	(typ)	
		[mm^2]	[°]	[µA]		[V]	[nm]	[µs]	
 Radial 5 mm	**SFH 213**	1.00	± 10	135 (≥ 100)	V_R = 5 V, Std. Light A, E_V = 1000 lx (SFH 213) V_R = 5 V, λ = 870 nm, E_e = 1 mW/cm^2 (SFH 213 FA)	20	400 ... 1100	0.005	L = 5.7 mm , W = 5.7 mm , H = 8.6 mm
 Radial 5 mm	**SFH 213 FA**	1.00	± 10	90 (≥ 65)	V_R = 5 V, Std. Light A, E_V = 1000 lx (SFH 213) V_R = 5 V, λ = 870 nm, E_e = 1 mW/cm^2 (SFH 213 FA)	20	750 ... 1100	0.005	L = 5.7 mm , W = 5.7 mm , H = 8.6 mm
 Sidelooker	**SFH 225 FA**	4.84	± 60	34 (≥ 25)	λ = 870 nm, E_e = 1 mW/cm^2, V_R = 5 V	20	740 ... 1120	0.02	L = 4.9 mm , W = 2.9 mm , H = 6.9 mm

Package	Type	Radiant sensitive area	Half angle	I_P	Measurement cond.	V_R	Spectral range	t_r, t_f	Package size
			φ (typ)			(max)	(typ)	(typ)	
		[mm^2]	[°]	[µA]		[V]	[nm]	[µs]	
 Radial 3 mm	**SFH 229**	0.31	± 17	28 (≥ 18)	V_R = 5 V, Std. Light A, E_V = 1000 lx (SFH 229) V_R = 5 V, λ = 950 nm, E_e = 1 mW/cm^2 (SFH 229 FA)	20	380 ... 1100	0.01	L = 3.8 mm , W = 3.8 mm , H = 4.85 mm
 Radial 3 mm	**SFH 229 FA**	0.31	± 17	20 (≥ 10.8)	V_R = 5 V, Std. Light A, E_V = 1000 lx (SFH 229) V_R = 5 V, λ = 950 nm, E_e = 1 mW/cm^2 (SFH 229 FA)	20	730 ... 1100	0.01	L = 3.8 mm , W = 3.8 mm , H = 4.85 mm
 Sidelooker	**SFH 235 FA**	7.02	± 65	50 (≥ 40)	λ = 870 nm, E_e = 1 mW/cm^2, V_R = 5 V	32	740 ... 1120	0.02	L = 4.9 mm , W = 2.9 mm , H = 6.9 mm
 Radial 5 mm	**SFH 2504**	0.31	± 60	2.7 (≥ 1.9)	V_R = 5 V, λ = 870 nm, E_e = 1 mW/cm^2	30	740 ... 1100	0.01	L = 5.7 mm , W = 5.4 mm , H = 4.4 mm

Photodiodes

Photodiodes for Special Applications

Package	Type	Radiant sensitive area	Half angle	I_P	Measurement cond.	V_R	Spectral range	t_r, t_f	Package size
			φ (typ)			(max)	(typ)	(typ)	
		[mm^2]	[°]	[µA]		[V]	[nm]	[µs]	
 Metal Can	**BPW 21**	7.45	± 55			10	350 ... 820	1.5	L = 9.3 mm , W = 9.3 mm , H = 3.2 mm
 SMT DIL	**BPW 34 B**	7.45	± 60	14.8 (≥ 10.8)	λ = 400 nm, E_e = 1 mW/ cm^2, V_R = 5 V	32	350 ... 1100	0.025	L = 5.2 mm , W = 3.9 mm , H = 2.05 mm
 SMT DIL	**BPW 34 BS**	7.45	± 60	14.8 (≥ 10.8)	λ = 400 nm, E_e = 1 mW/ cm^2, V_R = 5 V	32	350 ... 1100	0.025	L = 5.2 mm , W = 3.9 mm , H = 2.05 mm
 SMT DIL	**BPX 48**	1.54	± 60	24 (≥ 15)	E_v = 1000 lx, Std. Light A, V_R = 5 V, T = 2856 K	10	400 ... 1150	0.5	L = 7.6 mm , W = 3.9 mm , H = 2.05 mm
 Metal Can	**BPX 61**	7.02	± 55	70 (≥ 50)	E_v = 1000 lx, Std. Light A, V_R = 5 V	32	400 ... 1100	0.02	L = 9.3 mm , W = 9.3 mm , H = 3.2 mm
 Metal Can	**SFH 221**	1.54	± 55			10	400 ... 1100	0.5	L = 9.3 mm , W = 9.3 mm , H = 3.2 mm

Ambient Light Sensors

Package	Type	Radiant sensitive area	Half angle	I_{PCE}	Measurement cond.	V_{CE}	t_r, t_f	Package size
			φ (typ)			(max.)	(typ)	
		[mm^2]	[°]	[µA]		[V]	[µs]	
 Radial 3 mm	**SFH 3310**	0.29	± 75	2.5 ... 8	λ = 560 nm, E_e = 10 µW/cm^2, V_{CE} = 5 V	5.5		L = 3.8 mm , W = 3.8 mm , H = 2.8 mm
 Smart DIL	**SFH 3410**	0.29	± 60	3.2 ... 25	E_v = 20 lx, Std. Light A, V_{CE} = 5 V	5.5		L = 4.6 mm , W = 2.0 mm , H = 1.05 mm
	SFH 3410-1/ 2	0.29	± 60	3.2 ... 10	E_v = 20 lx, Std. Light A, V_{CE} = 5 V	5.5		L = 4.6 mm , W = 2.0 mm , H = 1.05 mm
	SFH 3410-2/ 3	0.29	± 60	5 ... 16	E_v = 20 lx, Std. Light A, V_{CE} = 5 V	5.5		L = 4.6 mm , W = 2.0 mm , H = 1.05 mm
	SFH 3410-3/ 4	0.29	± 60	8 ... 25	E_v = 20 lx, Std. Light A, V_{CE} = 5 V	5.5		L = 4.6 mm , W = 2.0 mm , H = 1.05 mm
 CHIPLED	**SFH 3710**	0.29	± 60	2.5 ... 12.5	λ = 560 nm, E_e = 10 µW/cm^2, V_{CE} = 5 V	5.5		L = 2.0 mm , W = 1.3 mm , H = 0.8 mm
	SFH 3710-2/ 3	0.29	± 60	2.5 ... 8	λ = 560 nm, E_e = 10 µW/cm^2, V_{CE} = 5 V	5.5		L = 2.0 mm , W = 1.3 mm , H = 0.8 mm
	SFH 3710-3/ 4	0.29	± 60	4 ... 12.5	λ = 560 nm, E_e = 10 µW/cm^2, V_{CE} = 5 V	5.5		L = 2.0 mm , W = 1.3 mm , H = 0.8 mm
 CHIPLED	**SFH 3711**	0.29	± 60	16 ... 80	E_v = 1000 lx, (white LED), V_{CE} = 5 V	5.5		L = 2.0 mm , W = 1.3 mm , H = 0.8 mm
	SFH 3711-1/ 2	0.29	± 60	16 ... 50	E_v = 1000 lx, (white LED), V_{CE} = 5 V	5.5		L = 2.0 mm , W = 1.3 mm , H = 0.8 mm
	SFH 3711 - 2/3	0.29	± 60	25 ... 80	E_v = 1000 lx, (white LED), V_{CE} = 5 V	5.5		L = 2.0 mm , W = 1.3 mm , H = 0.8 mm

Package	Type	Radiant sensitive area	Half angle	I_{OUT}	Measure-ment cond.	V_{CC}	Package size
			φ (typ)				
		[mm^2]	[°]	[µA]		[V]	
 CHIPLED	**SFH 5711-2/ 3**	0.16	± 60	27 - 32	E_V = 1000 lx (white LED LW 541C)	6	L = 2.8 mm , W = 2.2 mm , H = 1.1 mm

Package	Type	Radiant sensitive area	Half angle	I_P	Measure-ment cond.	V_R	Package size
			φ (typ)			(max)	
		[mm^2]	[°]	[µA]		[V]	
 TOPLED RG	**SFH 2270R**	0.16	± 60	0.0056 (≥ 0.0044)	λ = 560 nm, E_e = 0.01 mW/cm^2, V_R = 1 V	2	L = 5.2 mm , W = 2.8 mm , H = 1.9 mm

Photo IC

Package	Type	Half angle φ (typ) [°]	V_{CC} [V]	$E_{e\ typ}$ [mW/m^2]	Measurement cond.	Spectral range	I_{OUT} (max) [mA]	t_{PLH} [µs]	Package size
 Sidelooker	**SFH 5140 F**	± 12	4 ... 18	+150 (≤ +500)	"H" --> "L", V_{CC} = 5V, λ = 950 nm	typ 840 ... 1080	16	5 (≤ 15)	L = 3.0 mm , W = 2.9 mm , H = 4 mm
 Smart DIL	**SFH 5440**	± 60	4 ... 18	+1700 (≤ +3200)	V_{CC} = 5V, λ = 950 nm	typ 400 ... 1100	16	5 (≤ 15)	L = 4.6 mm , W = 2.0 mm , H = 1.05 mm

Slotted Interrupters

Package	Type	Slot Width	Aperture slit width on emitter / sensor side	I_{PCE}	Measurement cond.	I_{CE0}	Measurement cond.	Package size
			(typ)	(min)		(typ (max))		
		[mm]	[mm]	[µA]		[nA]		
 Custom Sensor	**SFH 9540**	5	typ 0.5 / 0.5	1000	I_F = 20 mA, V_{CE} = 5 V	2 (≤ 50)	V_{CE} = 20 V	L = 15.6 mm , W = 6.8 mm , H = 10 mm

SMT Reflective Sensors

Package	Type	I_{PCE}	I_{CE0}	Measurement cond.	V_{CE}	V_F	Measurement cond.	Package size
			(typ (max))		(max.)	(typ (max))		
		[µA]	[nA]		[V]	[V]		
 RLS	**SFH 9206**	160 ... 2000	1 (≤ 50)	V_{CE} = 16 V, E = 0	16	1.45 (≤ 1.8)	I_F = 50 mA, t_p = 20 ms	L = 6.0 mm , W = 4.0 mm , H = 1.9 mm
	SFH 9206-5/ 6	250 ... 800	1 (≤ 50)	V_{CE} = 16 V, E = 0	16	1.6 (≤ 2)	I_F = 50 mA, t_p = 20 ms	L = 6.0 mm , W = 4.0 mm , H = 1.9 mm
	SFH 9206-6/ 7	400 ... 1250	1 (≤ 50)	V_{CE} = 16 V, E = 0	16	1.6 (≤ 2)	I_F = 50 mA, t_p = 20 ms	L = 6.0 mm , W = 4.0 mm , H = 1.9 mm

Package	Type	Features	V_{CC}	$I_{F,on}$	Measurement cond.	$I_{e,off}$ / $I_{e,on}$	Package size
				(typ (max))		(typ (min..max))	
			[V]	[mA]			
 RLS	**SFH 9245**	Schmitt Trigger Output, active "low"	4 ... 18	1 (≤ 5)	Kodak neutral white testcard with 90% reflection; V_{CC} = 5 V, d = 1 mm	0.6 (0.5 ... 0.9)	L = 6.0 mm , W = 4.0 mm , H = 1.9 mm

SMT Proximity and Ambient Light Sensors

Package	Type	d	V_{dd}	I_f	Out	Illuminance measurement range	Out	Measurement cond.	$\lambda_{20\%}$	Package size
		(typ)							(typ.)	
		[mm]	[V]	[mA]	[counts]	[lx]	[counts/lx]		[nm]	
 Proximity / ALS	**SFH 7770 E6**	typ typ 0 ... typ 100	min 2.3 ... max 3.1	200	0 ... 254	0.03 ... 65000	0.6 ... 1.5	E_V = 1000 lx (white LED)	480 ... 660	L = 2.8 mm , W = 2.8 mm , H = 0.9 mm
 Proximity / ALS	**SFH 7771**		min 2.3 ... max 3.6	200		0.001 ... 43000		E_V = 1000 lx (white LED)	380 ... 950	L = 2.0 mm , W = 2.1 mm , H = 0.6 mm
 Proximity / ALS	**SFH 7776**	typ typ 0 ... typ 160	min 2.3 ... max 3.6	200		0.0022 ... 73000		E_V = 1000 lx (white LED)	450 ... 950	L = 3.9 mm , W = 2.1 mm , H = 1.35 mm
 Proximity / ALS	**SFH 7779**	typ typ 0 ... typ 160	min 2.3 ... max 3.6	200		0.0022 ... 73000		E_V = 1000 lx (white LED)	450 ... 950	L = 3.9 mm , W = 2.1 mm , H = 1.35 mm

Optical Temperature Sensor

Package	Type	Half angle	I_{PCE}	Measurement cond.	V_{CE}	t_r, t_f	Package size
		φ (typ)			(max.)	(typ)	
		[°]	[µA]		[V]	[µs]	
 Radial 5 mm	**SFH 2504**	± 60				0.01	L = 5.7 mm , W = 5.4 mm , H = 4.4 mm