

March 2011

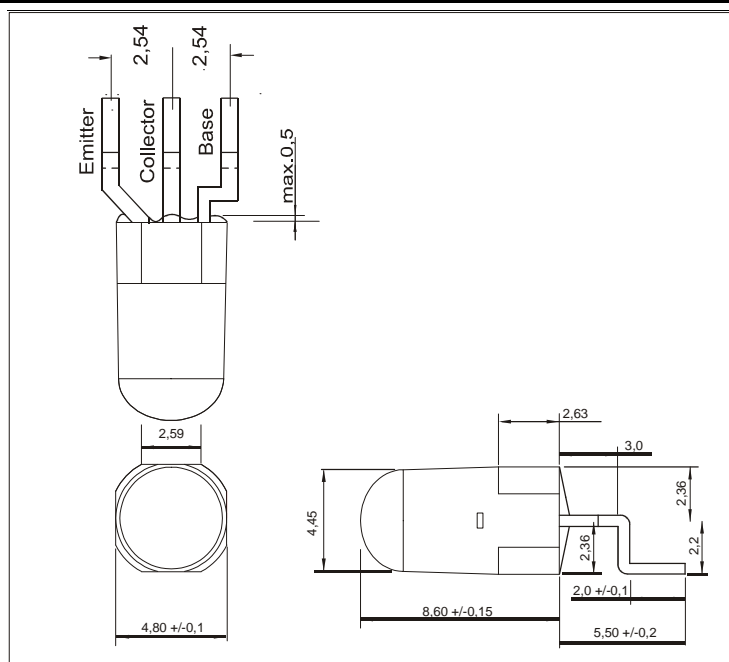
SMD-Phototransistor

8°

FSS6858OBK

Features

- * 4.8mm Phototransistor with separate Base for general purpose
- * Daylight filtered black housing optimized for LED's with 855nm - 870nm
- * Mechanical matched with FQS55563AT15, FQS55593BM14
- * SMT-Mountable in row with 5mm distance
- * Narrow viewing angle of typ. 8 degree



Electrical and optical characteristics and absolute maximum ratings (Ta=25°C unless otherwise noted)

Symbol	Parameter	MIN	Typ	MAX	Unit	Test conditions
I _{Light}	Light Current FSS6858 BINA	5,00		7,00	mA	V _{ce} =10V; E _e = 0.5mW/cm ² ; @940nm *
I _{Light}	Light Current FSS6858 BINB	7,00		9,00	mA	V _{ce} =10V; E _e = 0.5mW/cm ² ; @940nm *
I _{Light}	Light Current FSS6858 BINC	9,00		15,00	mA	V _{ce} =10V; E _e = 0.5mW/cm ² ; @940nm *
I _{ceo}	Collector Dark Current			100	nA	V _{ceo} =10V; E _v =0
V _{bceo}	Collector-Emitter Breakdown Voltage	30			V	I _c = 100μA H=0mW/cm ²
V _{beco}	Collector-Emitter Breakdown Voltage	5			V	I _c = 100μA H=0mW/cm ²
V _{sat}	Collector-Emitter Saturation Voltage			0,3	V	I _b = 100μA I _c =2mA
λ _{Peak}	Peak Wavelength	850	860	880	nm	max. sensitivity
λ _{0,5}	Spectral range	700		1100	nm	I=10%
t _f	Fall time		15		μs	V _R =5V; R _L =1KOhm, I _c =1mA
t _r	Rise time		15		μs	V _R =5V; R _L =1KOhm, I _c =1mA
A	Active Array		0,146		mm ²	
β	Current Gain	500		1000		V _{ce} =5V; I _c =2mA
2Φ _{0,5}	Response Angle	6	8	10	deg.	Φ _i = 50%
T _{Operating}	Operating Temperature	-25		85	°C	
T _{Storage}	Storage Temperature	-25		100	°C	
T _{Soldering}	Soldering Temperature			260	°C	5mm from case @5 sec.
Θ _{j-PIN}	Thermal Resistance		450		K/W	
P _{tot}	Total Power Dissipation			50	mW	

* delivery in BIN-Groups/REEL;

** Measurement tolerance of the optical values : +/- 10%

Order Informations :

 FSS6858OBK
 FSS6858OBK-TR

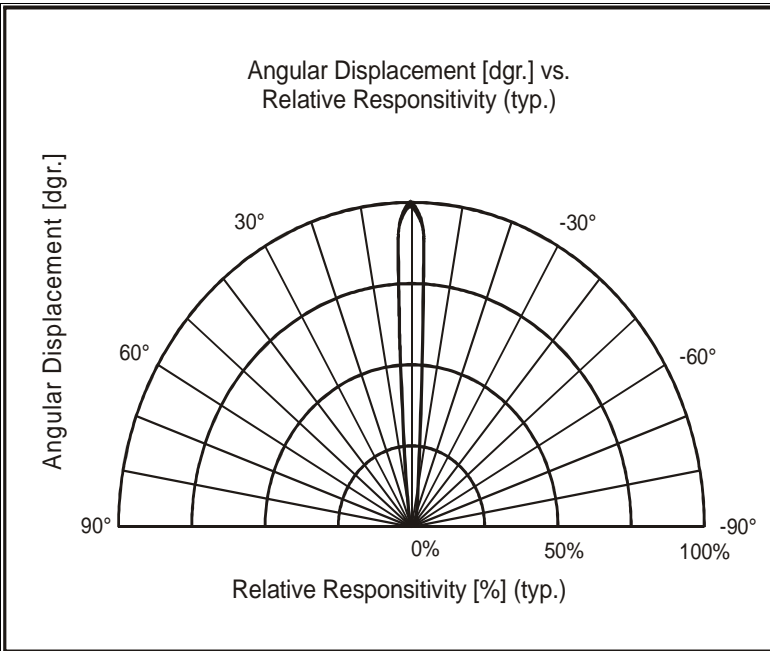
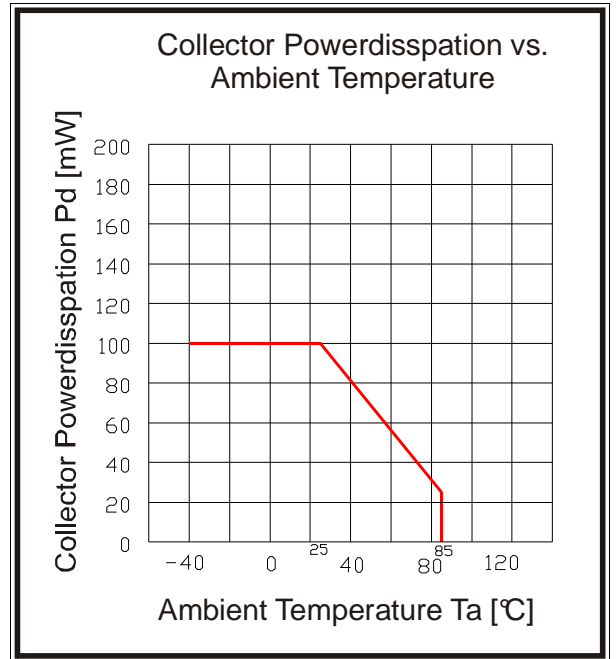
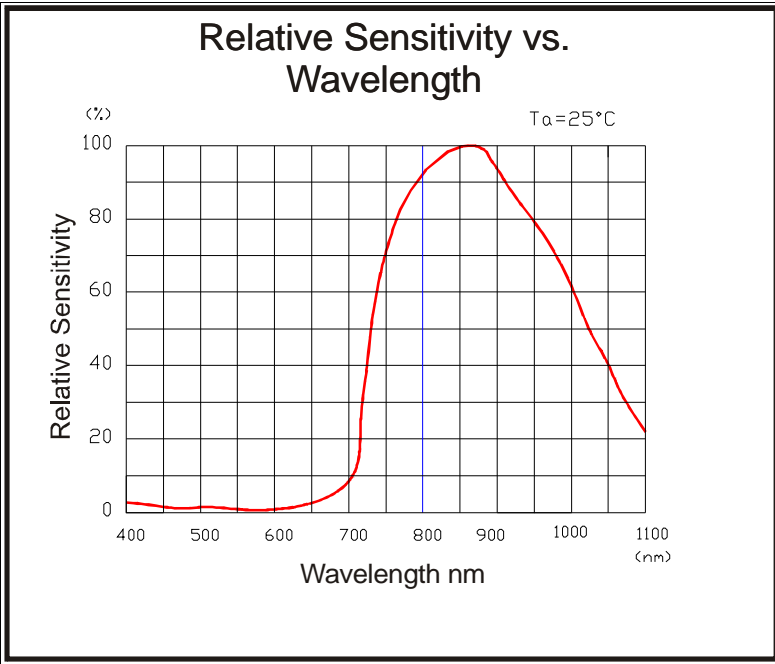
 Bulk (1000 pcs/Bag)
 Tape & Reeled (1000 pcs. /Reel)

Fietje Sensor&Optoelektronik GmbH reserves the right to make changes at any time in order to improve design and to supply the best product possible, contact us for latest device specification sheets before using.

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