

March 2011

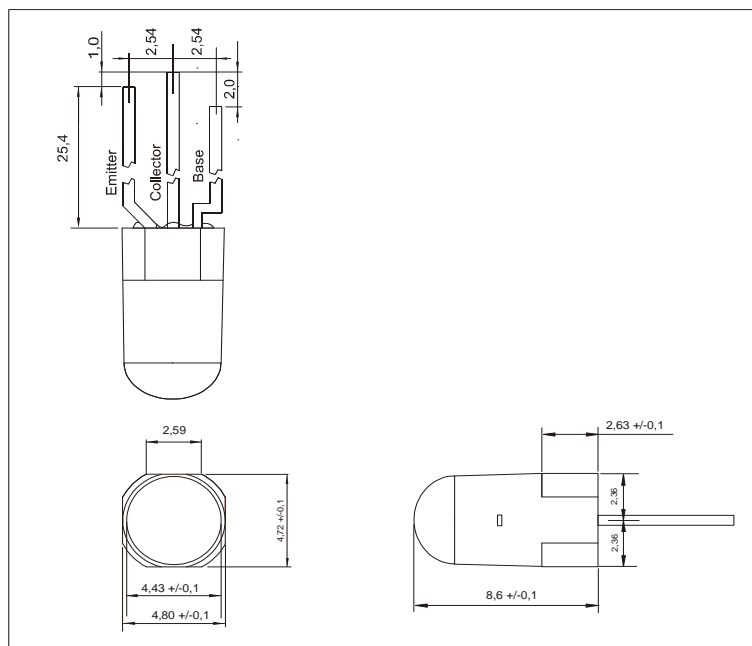
SMD-Phototransistor

8°

FSR6858OBK

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 _{ce0} =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 :

 FSR6858OBK
 FSR6858OBK-TR

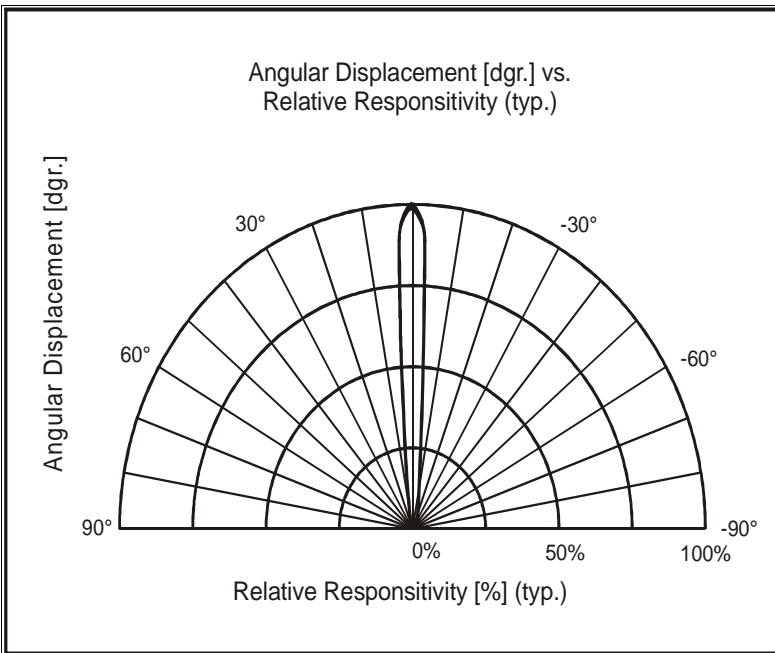
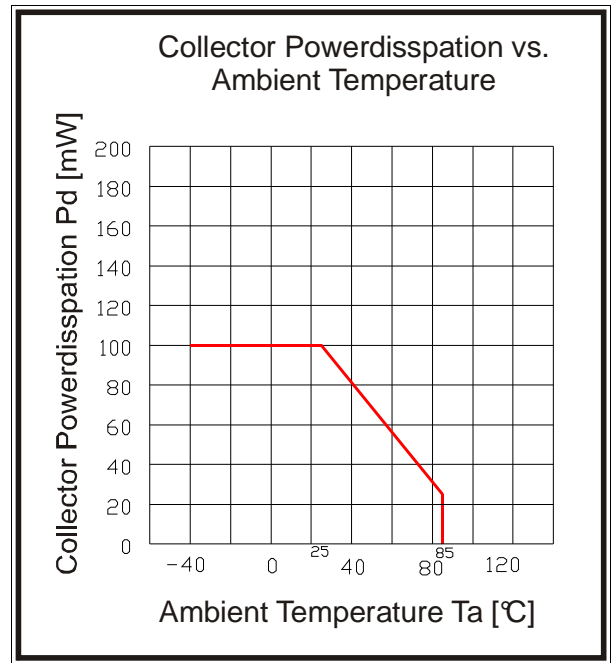
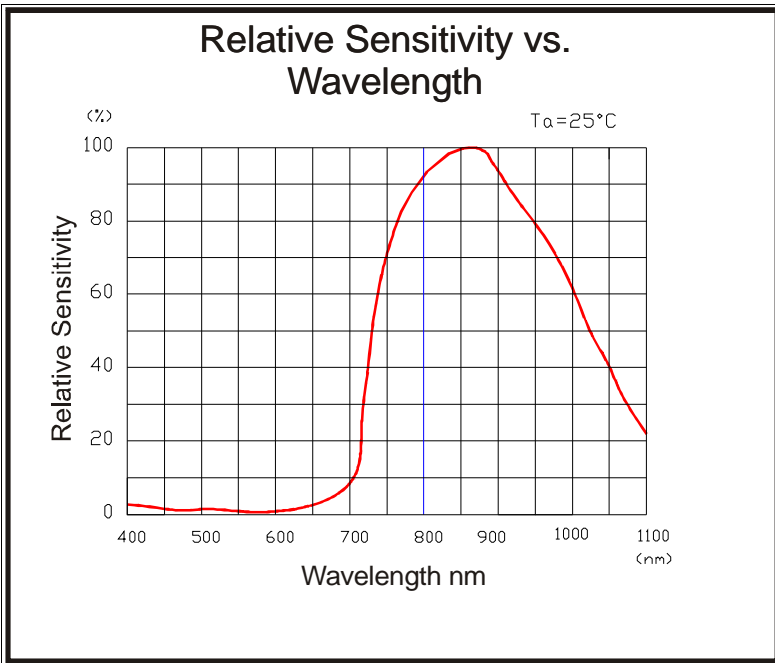
 Bulk (1000 pcs/Bag)
 Tape & Reeled (1000 pcs. /Reel)
 TR-on request only

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