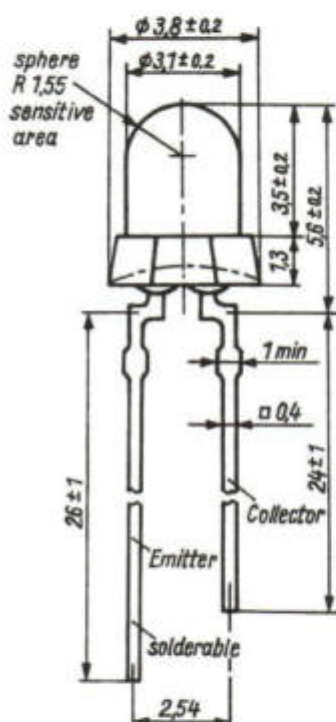


Phototransistor SP 213



Silicon-n-p-n planar phototransistor in 3 mm all-around plastic lens encapsulation. The spectral response sensitivity of the SP 213 is adapted to application in connection with GaAs-IRED.

This type has been developed by preference for its application in IR-light barriers, for remote control equipments, for electronics consumption goods, toys industry and for industrial electronics.



Mass: 0.12 g
Standard: TGL 42230

Characteristics at 25 °C

Collector current

at $E_v = 1000 \text{ lx}$

$U_{CE} = 5 \text{ V}$

I_C

min. max.

	1,0	-	mA
SP 213 A	1,0	2,0	mA
SP 213 B	1,6	3,2	mA
SP 213 C	2,5	5,0	mA
SP 213 D	3,6	-	mA

Collector-dark-current

at $E_e = 0$

$U_{CE} = 25 \text{ V}$

I_{CO}

- 100 nA

Spread angle

θ

60 °

Switching time

t_r, t_f

- 10 μs

Wave length of maximum spectral response sensitivity

λ_{max}

850 nm

Range of spectral response sensitivity

$\Delta\lambda$

450...1050 nm

Collector-emitter voltage

U_{CE0}

50 V

Emitter-collector voltage

U_{ECO}

7 V

Total power dissipation

P_{tot}

100 mW

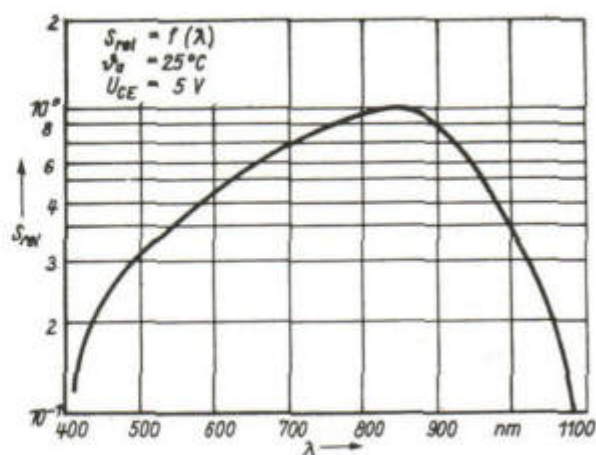
Range of operating temperature ϑ_a -40...+85 °C

Range of storage temperature ϑ_{atg} -50...+100 °C

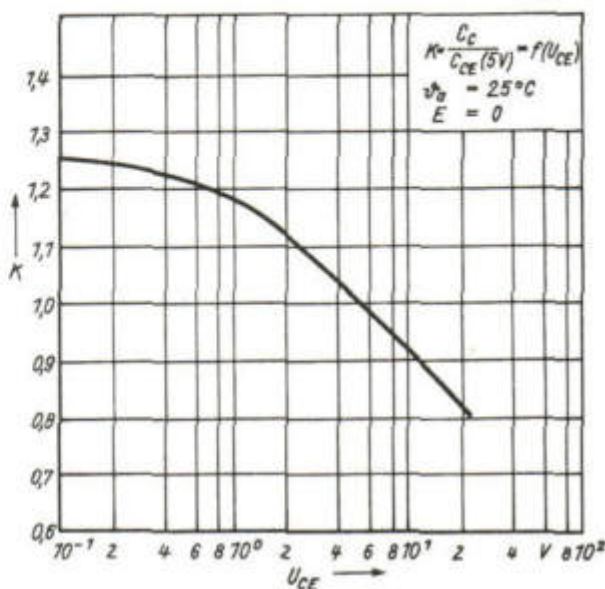
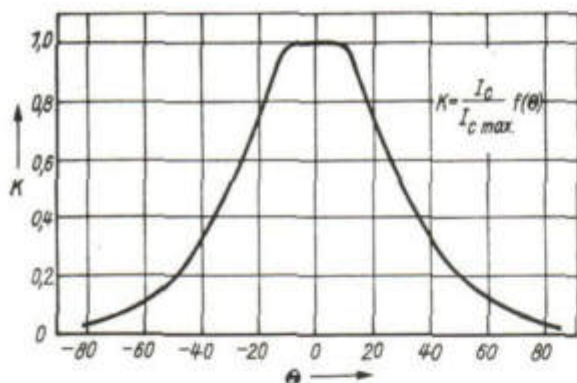
splash-and dipsoldering

Colour code on packing

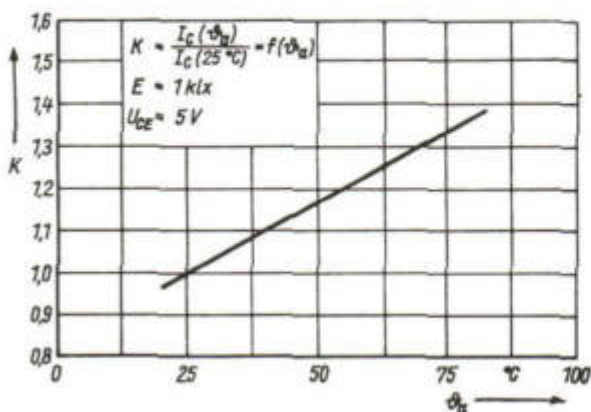
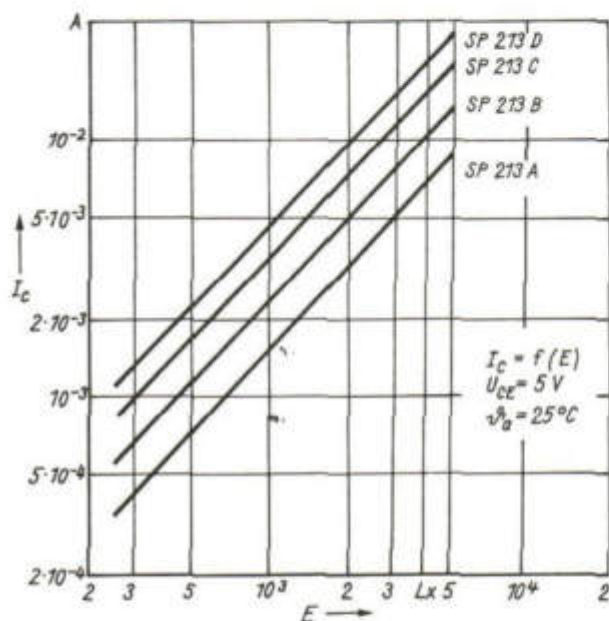
Current gain groups	A	B	C	D
Colour point	red	black	green	yellow



Relative spectral sensitivity

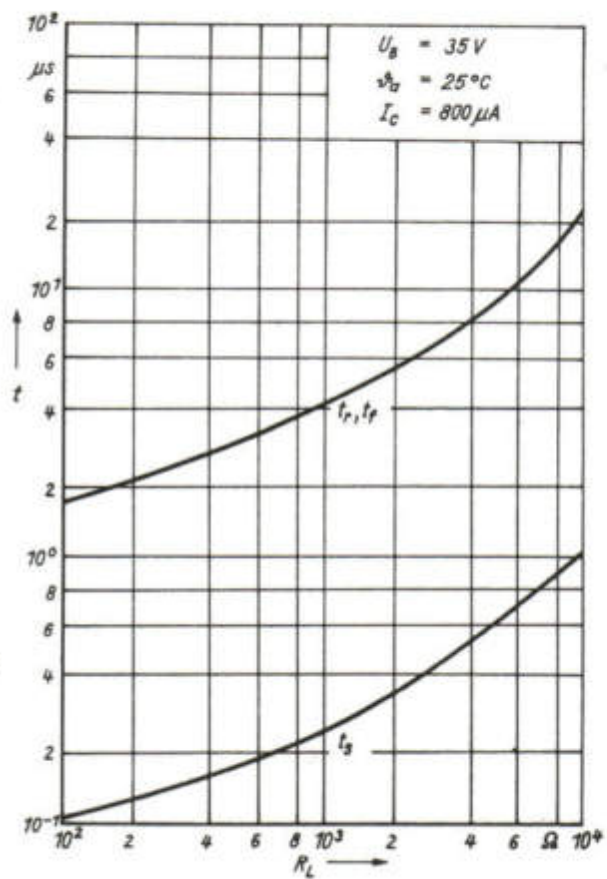


Collector-emitter-capacitance



Subject to modifications!

Time of going to press: January 1984



Risetime t_r
 decay time t_f
 storage time t_s

The logo consists of the letters 'RFT' in a bold, stylized font. The 'R' and 'F' have horizontal lines extending from their right sides, and the 'T' has a vertical line extending from its top.

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