

What makes one phototransistor different from others?

Photo current

SFH309	0.40 mA to 5.0 mA (The generic unrated part.)
SFH309-2	0.4 mA to 0.8 mA
SFH309-3	0.63 mA to 1.25 mA
SFH309-4	1.0 mA to 2.0 mA
SFH309-5	1.6 mA to 3.2 mA (G24996, T-1 case, 3 mm)
SFH309-6	2.5 mA to 5.0 mA
SFH309-3/4	0.63 mA to 2.0 mA
SFH309-4/5	1.0 mA to 3.2 mA
SFH309-5/6	1.6 mA to 5.0 mA
PT334-6C	1.7 mA to 3.5 mA (G21563, T=1 ¾, 5 mm case)
RNI-30W	0.30 mA to 0.80 mA (G24406, 3 mm)

Spectral range of sensitivity

SFH309-5	380 nm (near UV) to 1,150 nm (IR)
PT334-6C	400 nm to 1,100 nm
RNI-30W	420 nm to 1,120 nm

(not much difference)

Peak sensitivity

SFH309-5	860 nm (deep red)
PT334-6C	940 nm (deep red)
RNI-30W	940 nm

(not much difference)

Dark current

SFH309-5	1 nA
PT334-6C	100 nA
RNI-30W	100 nA

Speed

SFH309-5	Rise time – 7 µs, Fall time – 7 µs
PT334-6C	Rise time – 15 µs, Fall time – 15 µs
RNI-30W	Rise time – 15 µs, Fall time – 15 µs

Saturation voltage

SFH309-5	200 mV
RNI-30W	800 mV
PT334-6C	400 Mv