

Vishay Semiconductors

## **Conventions Used in Presenting Technical Data**

## **SYMBOLS AND TERMINOLOGY** (alphabetically)

Α	Radiant sensitive area	sr	Steradian
С	Capacitance	Т	Period (duration)
°C	Celsius	Т	Temperature
$C_j$	Junction capacitance	t	Time
$C_k$	Coupling capacitance	$T_{amb}$	Ambient temperature (range)
d	Distance	T <sub>case</sub>	Case temperature
$E_A$	Illumination at standard illuminant A	$t_d$	Delay time
E <sub>e</sub>	Irradiance (at a point of a surface)	t <sub>f</sub>	Fall time
$E_v$	Illuminance (at a point of a surface)	$T_j$	Junction temperature
f	Frequency	$t_{\rm off}$	Turn-off time
l <sub>e</sub>	Radiant intensity (of a source in a given direction)	t <sub>on</sub>	Turn-on time
I <sub>F</sub>	Forward current continuous	$t_p$	Pulse duration
$I_{FM}$	Peak forward current	$t_{pi}$	Input pulse duration
$I_{OH}$	High level output current	$t_{po}$	Output pulse duration
$I_{ph}$	Photocurrent (photoelectric current)	$t_r$	Rise time
I <sub>ra</sub>	Reverse light current	$t_s$	Storage time
$I_{ro}$	Reverse dark current	$T_{sd}$	Soldering temperature
$I_{SD}$	Supply current in dark ambient	$T_{stg}$	Storage temperature range
$I_{SH}$	Supply current in bright ambient	$V_{\text{CEsat}}$	Collector emitter saturation voltage
$I_{V}$	Luminous intensity (of a source, in a given direction)	$V_{EBO}$	Emitter base voltage, open collector
K	Kelvin	$V_{\text{ECO}}$	Emitter collector voltage, open base
lm	Lumen	$V_{F}$	Forward voltage
lx	Lux	$V_{O}$	Output voltage
NEP	Noise equivalent power	$V_{OH}$	Output voltage high
$P_{\text{diss}}$	Power dissipation, general	$V_{OL}$	Output voltage low
$P_{tot}$	Total power dissipation	$V_{R}$	Reverse voltage
PPT	Package peak temperature	$V_{S}, V_{CC}$	Supply voltage
$R_{IO}$	Input/output isolation resistor	$\varphi = \alpha/2$	Angle of half sensitivity, angle of half intensity
$R_{is}$	Isolation resistance	Ψ1/2	Angle of half transmission distance
$R_L$	Load resistance	λ	Wavelength, general
$R_{thJA}$	Thermal resistance, junction-to-ambient	$\lambda_{0.5}$	Range of spectral bandwidth (50 %)
$R_{thJC}$	Thermal resistance, junction-to-case	$\lambda_p$	Wavelength of peak sensitivity or peak emission
S	Sensitivity, absolute	$\Delta\lambda$	Spectral half bandwidth
$s(\lambda)$	Absolute spectral sensitivity at a wavelength $\boldsymbol{\lambda}$	$\Phi_{e}$	Radiant flux, radiant power
$s(\lambda)_{rel}$	Spectral sensitivity, relative	Ω	Solid angle
$s(\lambda_0)$	Spectral sensitivity at a reference wavelength $\boldsymbol{\lambda}_0$		
$s(\lambda_p)$	Spectral sensitivity at a reference wavelength $\boldsymbol{\lambda}_p$		