

<b>BASIC CHARACTERISTICS</b> ( $T_{amb} = 25\text{ }^{\circ}\text{C}$ , unless otherwise specified)						
PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNIT
<b>OUTPUT (DETECTOR) <sup>(2)</sup></b>						
Forward voltage	$I_F = 50\text{ mA}$	$V_F$		1	1.3	V
Breakdown voltage	$I_R = 100\text{ }\mu\text{A}$	$V_{BR}$	60			V
Reverse dark current	$V_R = 10\text{ V}$ , $E = 0\text{ lx}$	$I_{ro}$		1	10	nA
Diode capacitance	$V_R = 5\text{ V}$ , $f = 1\text{ MHz}$ , $E = 0\text{ lx}$	$C_D$		1.8		pF
Reverse light current	$E_e = 1\text{ mW/cm}^2$ , $\lambda = 950\text{ nm}$ , $V_R = 5\text{ V}$	$I_{ra}$		12		$\mu\text{A}$
Temperature coefficient of $I_{ra}$	$\lambda = 870\text{ nm}$ , $V_R = 5\text{ V}$	$TK_{Ira}$		0.2		%/K
Angle of half intensity		$\varphi$		$\pm 15$		deg
Wavelength of peak sensitivity		$\lambda_p$		930		nm
Range of spectral bandwidth		$\lambda_{0.5}$		840 to 1050		nm
<b>SENSOR</b>						
Reverse Light Current	$V_R = 2.5\text{ V}$ , $I_F = 20\text{ mA}$ , $D = 30\text{ mm}$ , reflective mode: see figure 2	$I_{ra}$	110	260		nA

**Notes**

- (1) See figures 2 to 8 accordingly  
 (2) See figures 9 to 12 accordingly

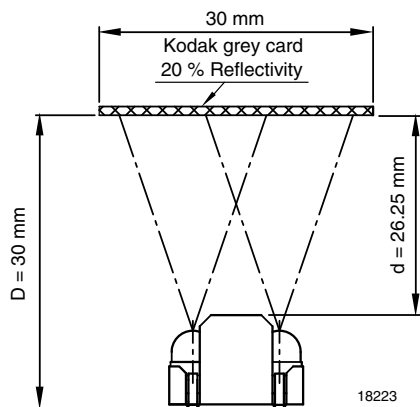


Fig. 2 - Test Circuit

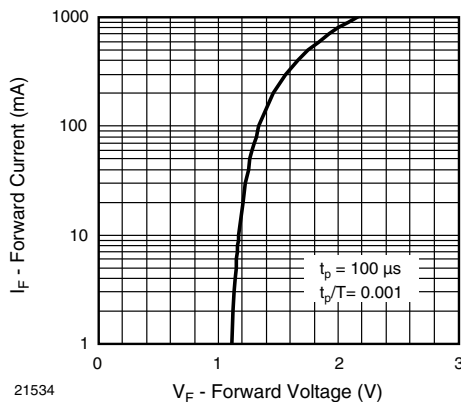
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Fig. 3 - Forward Current vs. Forward Voltage

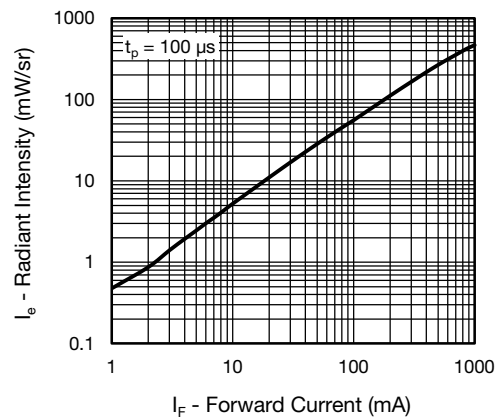


Fig. 4 - Radiant Intensity vs. Forward Current

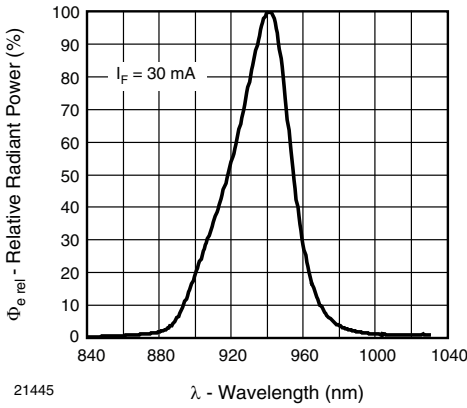


Fig. 5 - Relative Radiant Power vs. Wavelength

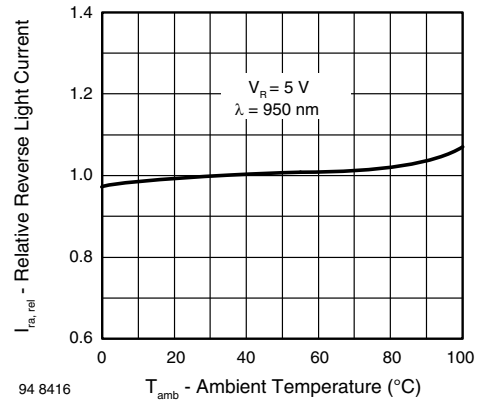


Fig. 8 - Relative Reverse Light Current vs. Ambient Temperature

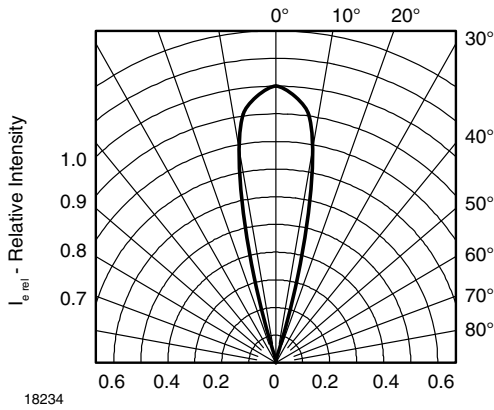


Fig. 6 - Relative Radiant Intensity vs. Angular Displacement

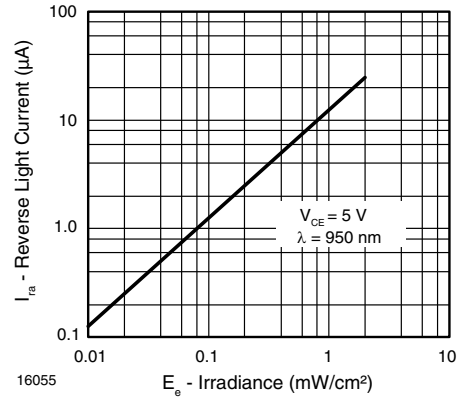


Fig. 9 - Reverse Light Current vs. Irradiance

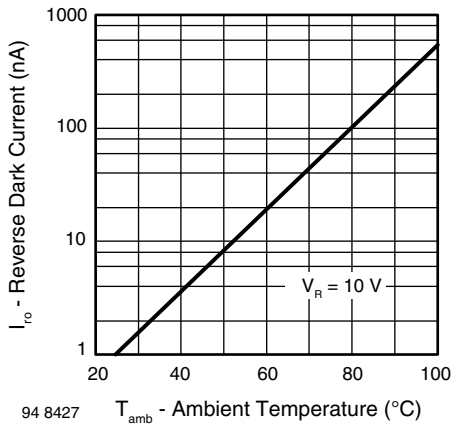


Fig. 7 - Reverse Dark Current vs. Ambient Temperature

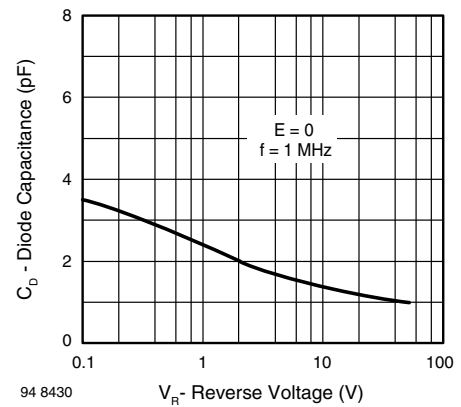


Fig. 10 - Diode Capacitance vs. Reverse Voltage