



ELECTRO-OPTICAL CHARACTERISTICS  $T_A=25^\circ\text{C}$

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST COND
<b>INPUT:</b>						
PEAK WAVELENGTH			940		nm	
FORWARD VOLTAGE	$V_f$		1.2	1.5	V	$I_f = 20\text{ mA}$
REVERSE CURRENT	$I_r$			10	$\mu\text{A}$	$V_f = 5\text{ V}$
<b>OUTPUT:</b>						
COLLECTOR DARK CURRENT	$I_{ced}$			0.1	$\mu\text{A}$	$V_{ce} = 5\text{ V}$
COLLECTOR LIGHT CURRENT	$I_L$			1.6	mA	$V_{ce} = 5\text{ V}$ $I_f = 20\text{ mA}$
LEAKAGE CURRENT	$I_{ceod}$			2	$\mu\text{A}$	$V_{ce} = 5\text{ V}$ $I_f = 20\text{ mA}$
<b>SWITCHING SPEEDS:</b>						
RISING TIME	$T_r$		25		$\mu\text{s}$	$V_{cc} = 5\text{ V}$ $I_c = 0.1\text{ mA}$
FALLING TIME	$T_f$		25		$\mu\text{s}$	$R_I = 100\ \Omega$

LIMITS OF SAFE OPERATION AT  $25^\circ\text{C}$

PARAMETER	SYMBOL	MAX	UNITS
<b>INPUT:</b>			
REVERSE VOLTAGE	$V_r$	5	V
POWER DISSIPATION	$P_d$	100	mW
FORWARD CURRENT	$I_f$	50	mA
<b>OUTPUT:</b>			
COLLECTOR POWER DISSIPATION	$P_c$	75	mW
COLLECTOR CURRENT	$I_c$	20	mA
C-E VOLTAGE	$V_{ceo}$	30	V
E-C VOLTAGE	$V_{eco}$	5	V
OPERATING TEMP.	$T_{opr}$	-25 TO +85	$^\circ\text{C}$
STORAGE TEMP.	$T_{stg}$	-40 TO +85	$^\circ\text{C}$
SOLDERING TEMP.	$T_{sld}$	+260	$^\circ\text{C}$
2.0mm FROM BODY	dist.		5 SEC. MAX

\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030), MIN= <sup>+0.00</sup>/<sub>-0.00</sub> DECIMAL PRECISION, MAX= <sup>+0.00</sup>/<sub>-0.00</sub> DECIMAL PRECISION.

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REFLECTIVE PHOTO SENSOR.		<p>DRAWN BY: <b>JD</b></p> <p>CHECKED BY:</p> <p>APPROVED BY:</p> <p>DATE: 10.28.04 PAGE: 1 OF 1 SCALE: N/A</p>	