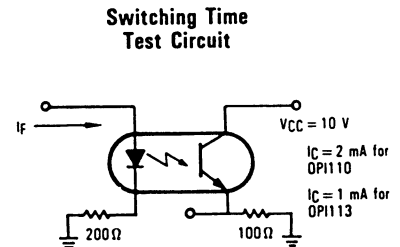
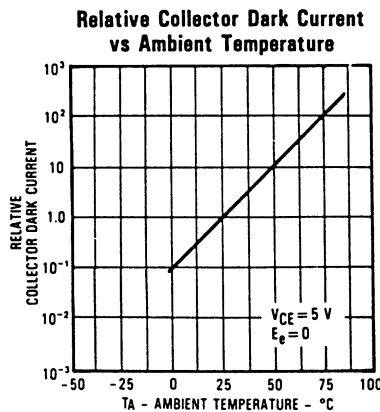
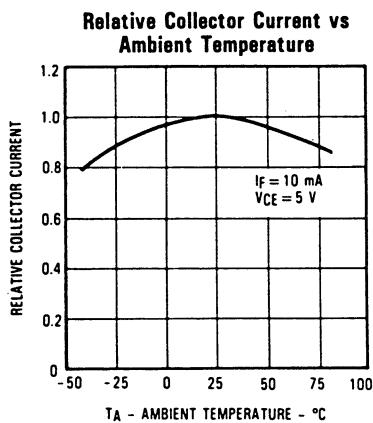
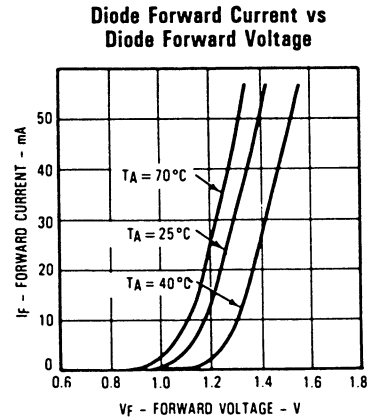
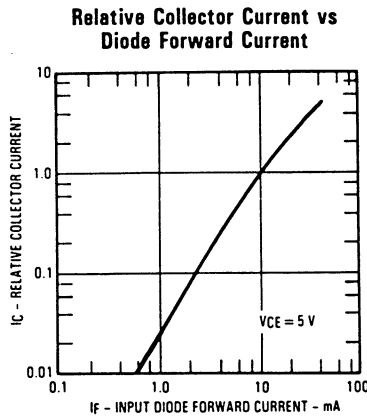
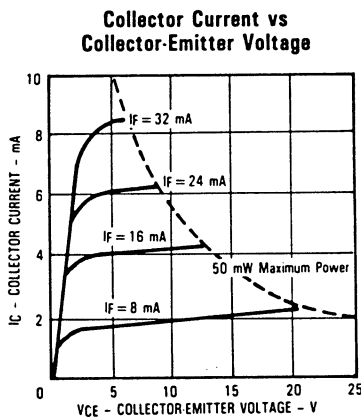


Types OPI110, OPI110A, OPI110B, OPI110C, OPI113

Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Input Diode						
V_F	Forward Voltage			1.60	V	$I_F = 20\text{ mA}$
I_R	Reverse Current			100	μA	$V_R = 2.0\text{ V}$
Output Photosensor						
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	OPI110 OPI113	30 15		V V	$I_C = 100\ \mu\text{A}$ $I_C = 100\ \mu\text{A}, I_F = 0$
$V_{(BR)ECO}$	Emitter-Collector Breakdown Voltage		5.0		V	$I_E = 100\ \mu\text{A}, I_F = 0$
I_{CEO}	Collector-Emitter Dark Current	OPI110 OPI113		100 100	nA nA	$V_{CE} = 15\text{ V}, E_e = 0$ $V_{CE} = 10\text{ V}, E_e = 0$
Coupled						
I_C/I_F	DC Current Transfer Ratio	OPI110 OPI110A OPI110B OPI110C OPI113	12.5 25 50 100 50	400	% % % % %	$I_F = 10.0\text{ mA}, V_{CE} = 5.0\text{ V}$ $I_F = 10.0\text{ mA}, V_{CE} = 5.0\text{ V}$ $I_F = 10.0\text{ mA}, V_{CE} = 5.0\text{ V}$ $I_F = 10.0\text{ mA}, V_{CE} = 5.0\text{ V}$ $I_F = 5.0\text{ mA}, V_{CE} = 2.0\text{ V}$
$V_{CE(SAT)}$	Collector Saturation Voltage	OPI110 OPI113		0.40 1.20	V V	$I_F = 10.0\text{ mA}, I_C = 1.6\text{ mA}$ $I_F = 10.0\text{ mA}, I_C = 5.0\text{ mA}$
I_{CEO}	Collector-Emitter Dark Current	OPI110 OPI113		200 100	nA nA	$V_{CE} = 20.0\text{ V}, I_F = 0$ $V_{CE} = 10.0\text{ V}, I_F = 0$
V_{ISO}	Isolation Voltage		10.0		kVDC	(See Note 1)

Typical Performance Curves (OPI110 Only)



t_r and t_f for OPI110 are typically 4 μs .
 t_r and t_f for OPI113 are typically 40 μs .
 The input waveform is supplied by a generator with the following characteristics: $Z_{OUT} = 50\ \Omega$, $t_r \leq 15\text{ ns}$, duty cycle $\cong 1\%$, pulse width = 100 μs .

OPTICALLY COUPLED ISOLATORS

Optek reserves the right to make changes at any time in order to improve design and to supply the best product possible.

Optek Technology, Inc. 1215 W. Crosby Road Carrollton, Texas 75006 (972)323-2200 Fax (972)323-2396