Absolute Maximum Ratings (T_A = 25° C unless otherwise noted)	
Storage Temperature Range	-40° C to + 125° C
Operating Temperature Range	-40° C to + 100° C
Lead Soldering Temperature	260° C
Input Diode	
Continuous Forward Current	100 mA
Reverse Voltage	2 V
Power Dissipation(1)	80 mW
Output Phototransistor	
Collector-Emitter Voltage OPB700Z, OPB700ALZ OPB70Z1, OPB701ALZ	 24 V 15 V
Emitter-Collector Voltage	5 V
Power Dissipation(1)	50 mW

Notes:

(1) Derate linearly 1.07 mW/°C above 25 ° C.

Electrical Characteristics (T_A = 25° C unless otherwise noted)

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Input Diode						
V_F	Forward Voltage	-	-	1.7	V	I_F = 50 mA
I_R	Reverse Current	-	-	100	µA	V_R = 2 V
Output Phototransistor						
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage OPB700Z, OPB700ALZ OPB701Z, OPB701ALZ	 25 15	 - -	 - -	 V V	 I_C = 100 µA I_C = 100 µA
$V_{(BR)ECO}$	Emitter-Collector Breakdown Voltage	5	-	-	V	I_E = 100 µA
I_{CEO}	Collector Dark Current OPB700Z, OPB700ALZ OPB701Z, OPB701ALZ	 - -	 - -	 100 250	 nA nA	 V_{CE} = 10 V, I_F = 0, E_E = ≤0.1 µW/cm^2 V_{CE} = 10 V, I_F = 0, E_E = ≤0.1 µW/cm^2

Notes:

(1) Measured using Eastman Kodak neutral white test card with 90% diffuse reflectance as a reflecting surface. Reference: Eastman Kodak, Catalog # E 152 7795.

General Note

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

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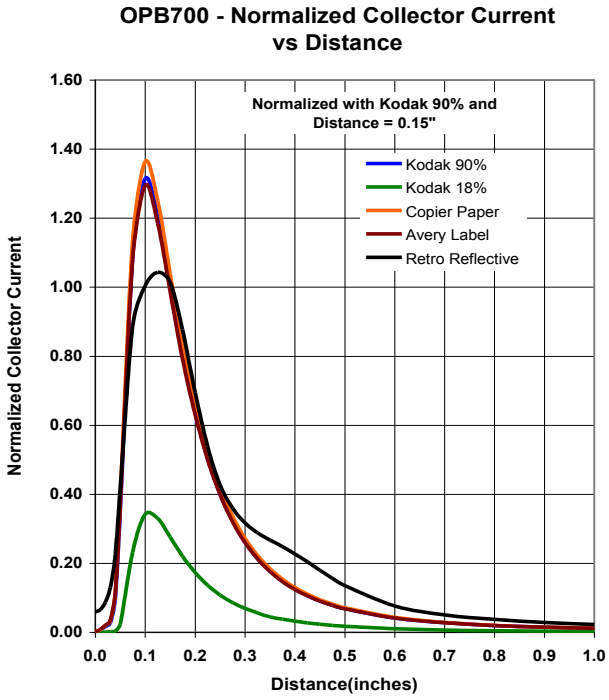
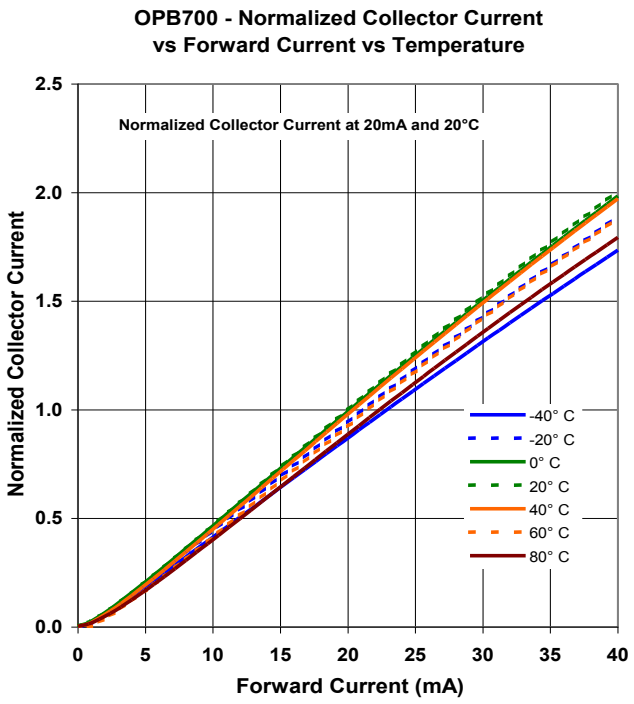
Electrical Characteristics (T_A = 25° C unless otherwise noted)						
SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Coupled Parameters OPB700Z, OPB700ALZ (Phototransistor)						
$I_{C(ON)}$	Collector current	0.10	-	2.50	mA	V_{CE} = 5.0V(1), I_F = 40mA
$V_{CE(SAT)}$	Saturation Voltage	-	-	0.40	V	I_C = 10µA, I_F = 40mA
I_{CX}	Leakage Current	-	-	2.00	µA	V_{CE} = 5.0V, I_F = 40mA, NO Reflective Surface
Coupled Parameters OPB701Z, OPB701ALZ (Photodarlington)						
$I_{C(ON)}$	Collector current	2.50	-	43.00	mA	V_{CE} = 5.0V(1)
$V_{CE(SAT)}$	Saturation Voltage	-	-	1.10	V	I_C = 10µA, I_F = 40mA
I_{CX}	Leakage Current	-	-	20.0	µA	V_{CE} = 5.0V, I_F = 40mA, NO Reflective Surface

Notes:

(1) Measured using Eastman Kodak neutral white test card with 90% diffuse reflectance as a reflecting surface. Reference: Eastman Kodak, Catalog # E 152 7795.





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