

H11D1 H11D2

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)⁽¹⁾

Characteristic	Symbol	Min	Typ ⁽¹⁾	Max	Unit
INPUT LED (T _A = 25°C unless otherwise noted)					
Reverse Leakage Current (V _R = 6 V)	I _R	—	—	10	μA
Forward Voltage (I _F = 10 mA)	V _F	—	1.2	1.5	Volts
Capacitance (V = 0 V, f = 1 MHz)	C	—	18	—	pF

OUTPUT TRANSISTOR (T_A = 25°C and I_F = 0 unless otherwise noted)

Collector–Emitter Dark Current (R _{BE} = 1 MΩ) (V _{CE} = 200 V, T _A = 25°C) (T _A = 100°C)	H11D1,2 H11D1,2	I _{CER}	— —	— —	100 250	nA μA
Collector–Base Breakdown Voltage (I _C = 100 μA)	H11D1,2	V _{(BR)CBO}	—	—	300	Volts
Collector–Emitter Breakdown Voltage (I _C = 1 mA, R _{BE} = 1 MΩ)	H11D1,2	V _{(BR)CER}	—	—	300	Volts
Emitter–Base Breakdown Voltage (I _E = 100 μA)		V _{(BR)EBO}	7	—	—	Volts

COUPLED (T_A = 25°C unless otherwise noted)

Output Collector Current (V _{CE} = 10 V, I _F = 10 mA, R _{BE} = 1 MΩ)	H11D1,2	I _C (CTR) ⁽²⁾	2 (20)	—	—	mA (%)
Surge Isolation Voltage (Input to Output) ⁽³⁾ Peak ac Voltage, 60 Hz, 1 sec		V _{ISO}	7500	—	—	Vac(pk)
Isolation Resistance ⁽³⁾ (V = 500 V)		R _{ISO}	—	10 ¹¹	—	Ohms
Collector–Emitter Saturation Voltage (I _C = 0.5 mA, I _F = 10 mA, R _{BE} = 1 MΩ)		V _{CE(sat)}	—	—	0.4	Volts
Isolation Capacitance ⁽³⁾ (V = 0, f = 1 MHz)		C _{ISO}	—	0.2	—	pF
Turn-On Time	V _{CC} = 10 V, I _C = 2 mA, R _L = 100 Ω	t _{on}	—	5	—	μs
Turn-Off Time		t _{off}	—	5	—	μs

1. Always design to the specified minimum/maximum electrical limits (where applicable).
2. Current Transfer Ratio (CTR) = I_C/I_F × 100%.
3. For this test, Pins 1 and 2 are common, and Pins 4, 5 and 6 are common.

TYPICAL CHARACTERISTICS

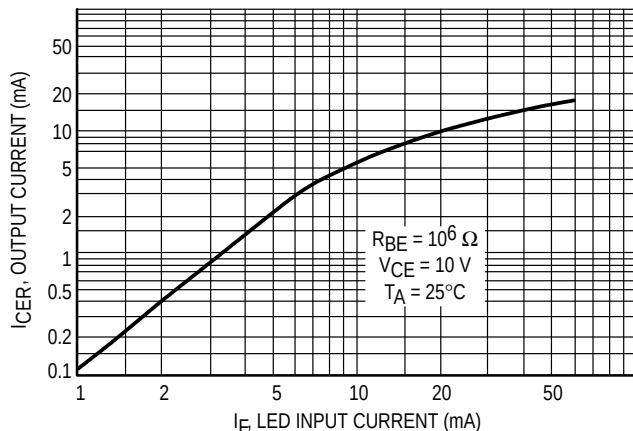


Figure 1. Output Current versus LED Input Current

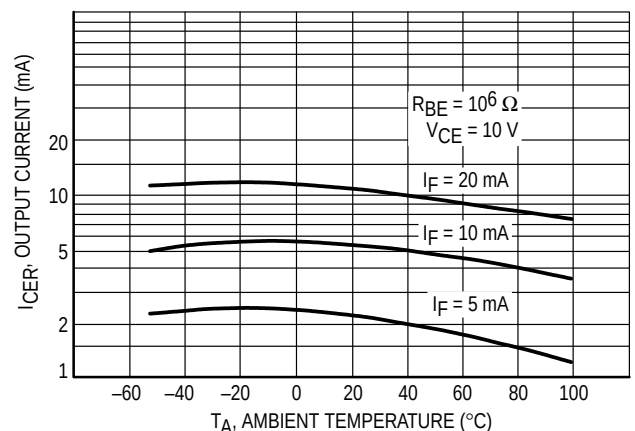
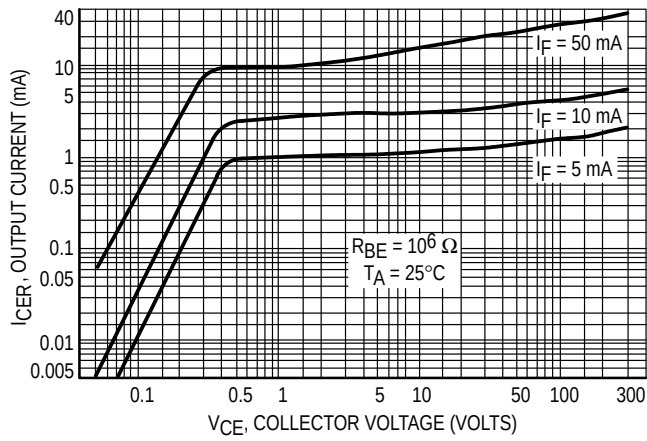
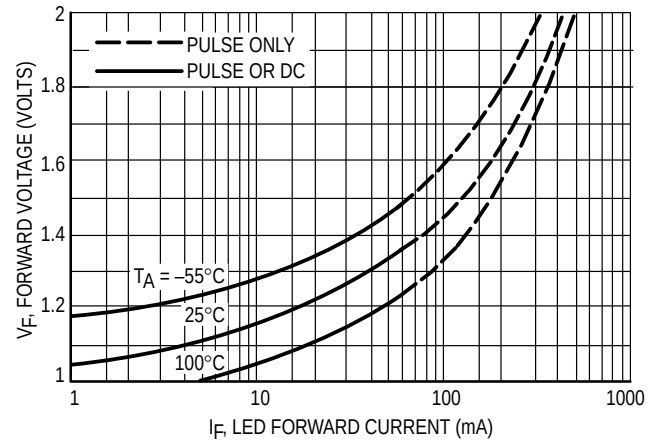
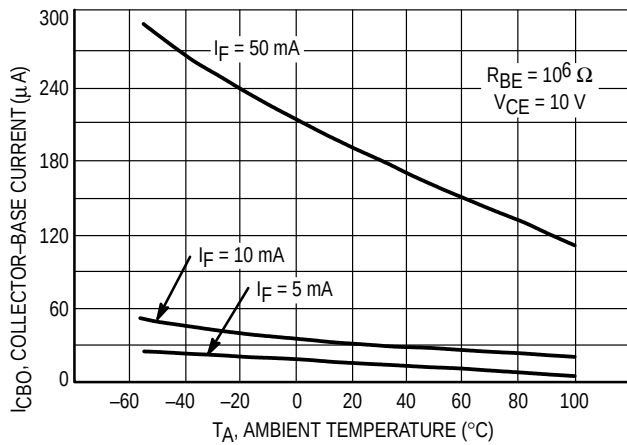
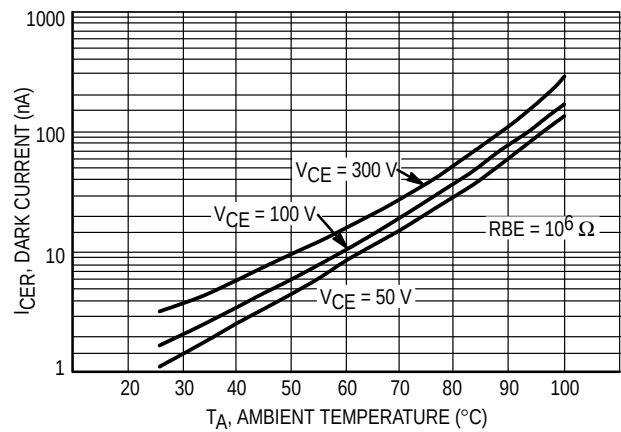
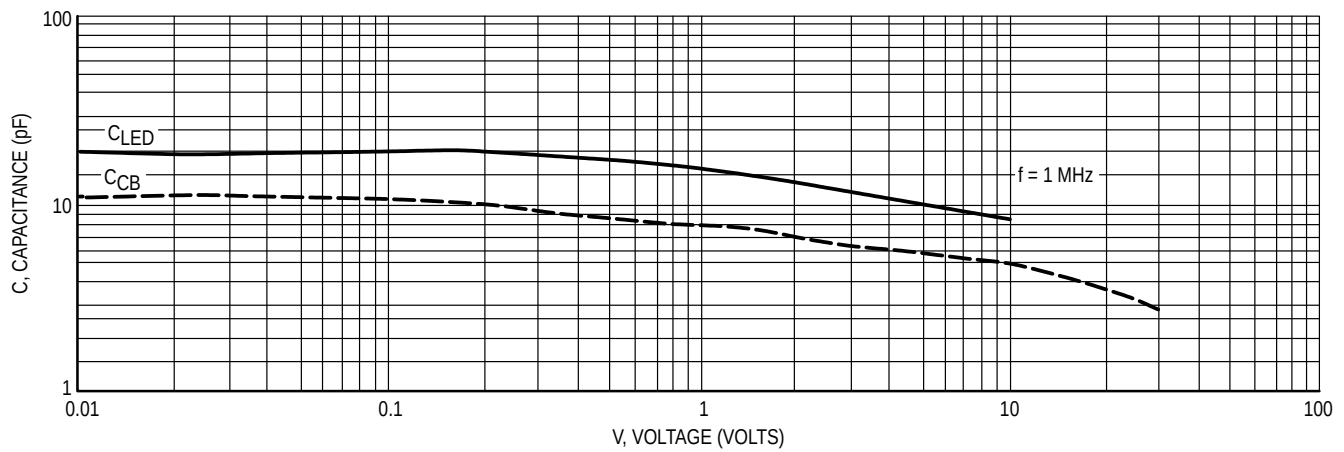
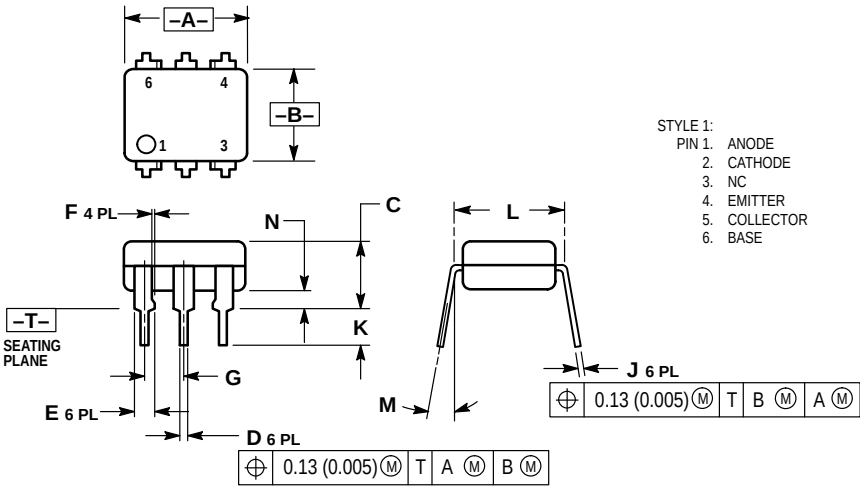


Figure 2. Output Current versus Temperature


Figure 3. Output Characteristics

Figure 4. Forward Characteristics

Figure 5. Collector-Base Current versus Temperature

Figure 6. Dark Current versus Temperature

Figure 7. Capacitance versus Voltage

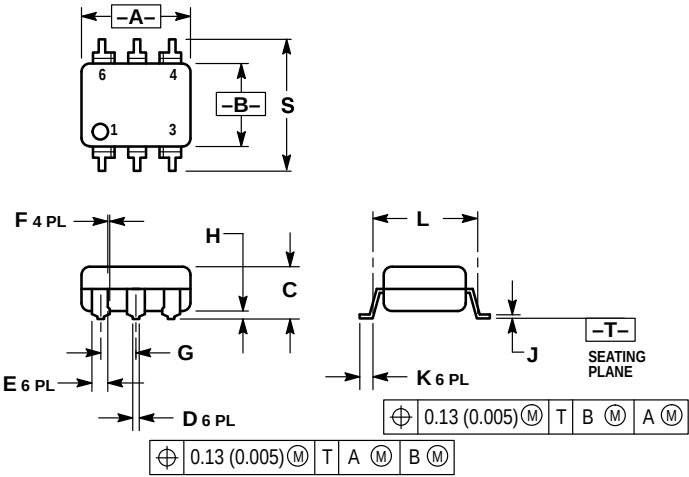
PACKAGE DIMENSIONS



- NOTES:
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
 2. CONTROLLING DIMENSION: INCH.
 3. DIMENSION L TO CENTER OF LEAD WHEN FORMED PARALLEL.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.320	0.350	8.13	8.89
B	0.240	0.260	6.10	6.60
C	0.115	0.200	2.93	5.08
D	0.016	0.020	0.41	0.50
E	0.040	0.070	1.02	1.77
F	0.010	0.014	0.25	0.36
G	0.100 BSC		2.54 BSC	
J	0.008	0.012	0.21	0.30
K	0.100	0.150	2.54	3.81
L	0.300 BSC		7.62 BSC	
M	0° 15°		0° 15°	
N	0.015	0.100	0.38	2.54

CASE 730A-04
ISSUE G

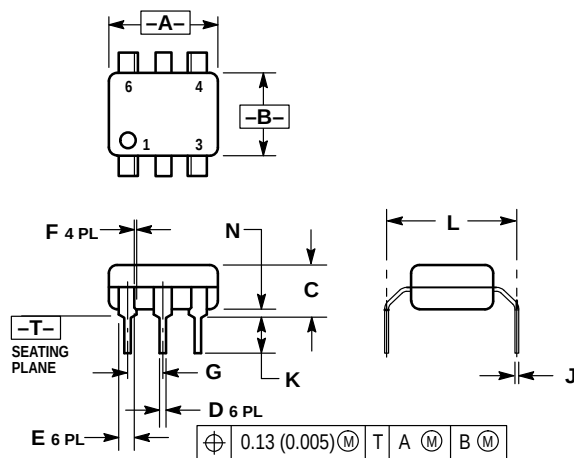


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C	0.115	0.200	2.93	5.08
D	0.016	0.020	0.41	0.50
E	0.040	0.070	1.02	1.77
F	0.010	0.014	0.25	0.36
G	0.100 BSC		2.54 BSC	
H	0.020	0.025	0.51	0.63
J	0.008	0.012	0.20	0.30
K	0.006	0.035	0.16	0.88
L	0.320 BSC		8.13 BSC	
S	0.332	0.390	8.43	9.90

*Consult factory for leadform
option availability

CASE 730C-04
ISSUE D



NOTES:

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3. DIMENSION L TO CENTER OF LEAD WHEN FORMED PARALLEL.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.320	0.350	8.13	8.89
B	0.240	0.260	6.10	6.60
C	0.115	0.200	2.93	5.08
D	0.016	0.020	0.41	0.50
E	0.040	0.070	1.02	1.77
F	0.010	0.014	0.25	0.36
G	0.100 BSC		2.54 BSC	
J	0.008	0.012	0.21	0.30
K	0.100	0.150	2.54	3.81
L	0.400	0.425	10.16	10.80
N	0.015	0.040	0.38	1.02

***Consult factory for leadform option availability**

**CASE 730D-05
ISSUE D**

H11D1 H11D2

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How to reach us:

USA / EUROPE: Motorola Literature Distribution;
P.O. Box 20912; Phoenix, Arizona 85036. 1-800-441-2447

JAPAN: Nippon Motorola Ltd.; Tatsumi-SPD-JLDC, Toshikatsu Otsuki,
6F Seibu-Butsuryu-Center, 3-14-2 Tatsumi Koto-Ku, Tokyo 135, Japan. 03-3521-8315

MFAX: RMFAX0@email.sps.mot.com – TOUCHTONE (602) 244-6609
INTERNET: <http://Design-NET.com>

HONG KONG: Motorola Semiconductors H.K. Ltd.; 8B Tai Ping Industrial Park,
51 Ting Kok Road, Tai Po, N.T., Hong Kong. 852-26629298



H11D1/D

