

6-Pin DIP High Voltage
Photodarlington
Optocouplers

H11G1M, H11G2M

Description

The H11G1M and H11G2M are photodarlington type optically coupled optocouplers. These devices have a gallium arsenide infrared emitting diode coupled with a silicon darlington connected phototransistor which has an integral base emitter resistor to optimize elevated temperature characteristics.

Features

- High BV_{CEO} :
 - ♦ 100 V Minimum for H11G1M
 - ♦ 80 V Minimum for H11G2M
- High Sensitivity to Low Input Current
(Minimum 500% CTR at $I_F = 1$ mA)
- Low Leakage Current at Elevated Temperature
(Maximum 100 μ A at 80°C)
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H11G1M, H11G2M

SAFETY AND INSULATION RATINGS

(As per DIN EN/IEC 60747-5)

H11G1M, H11G2M

ELECTRICAL CHARACTERISTICS – INDIVIDUAL COMPONENT CHARACTERISTICS

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

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
EMITTER						
V_F	Forward Voltage	$I_F = 10 \text{ mA}$		1.3	1.5	V
$\Delta V_F / \Delta T_A$	Forward Voltage Temperature Coefficient			1.8		mV/°C
BV_R	Reverse Breakdown Voltage	$I_R = 10 \mu\text{A}$	3.0	25		V
C_J	Junction Capacitance	$V_F = 0 \text{ V}, f = 1 \text{ MHz}$		50		pF
		$V_F = 1 \text{ V}, f = 1 \text{ MHz}$		65		pF
I_R	Reverse Leakage Current	$V_R = 3.0 \text{ V}$				

H11G1M, H11G2M

TYPICAL PERFORMANCE CURVES

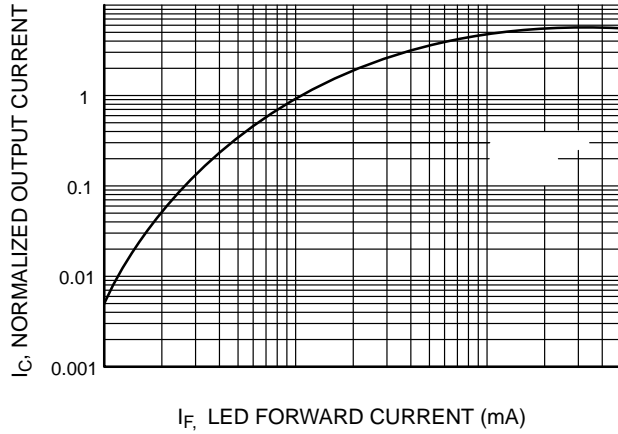


Figure 1. Output Current vs. Input Current

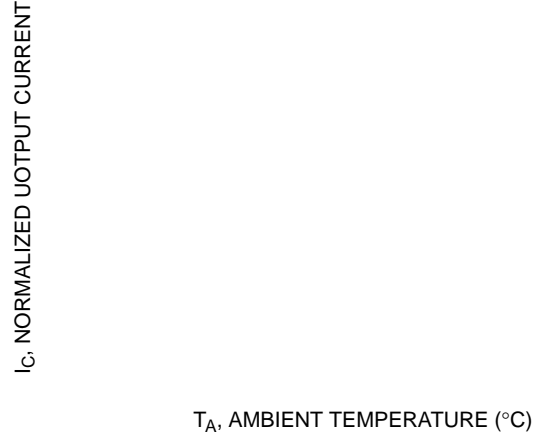


Figure 2. Normalized Output Current vs. Temperature

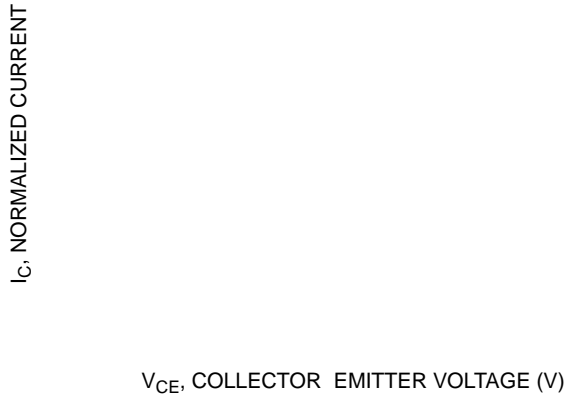


Figure 3. Output Current vs. Collector-Emitter Voltage

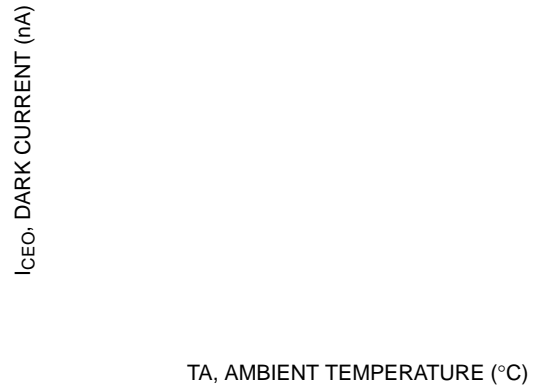


Figure 4. Collector-Emitter Dark Current vs. Ambient Temperature

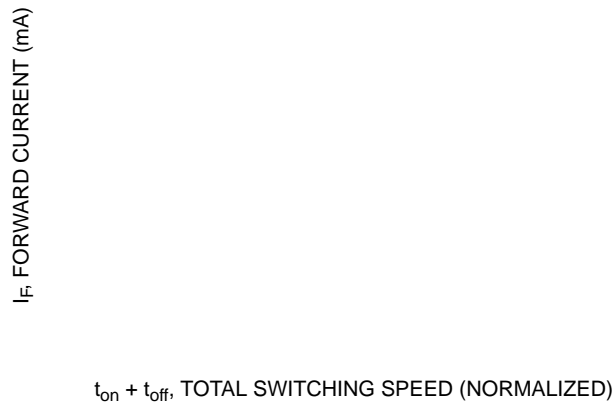


Figure 5. Input Current vs. Total Switching Speed (Typical Values)

H11G1M, H11G2M

REFLOW PROFILE

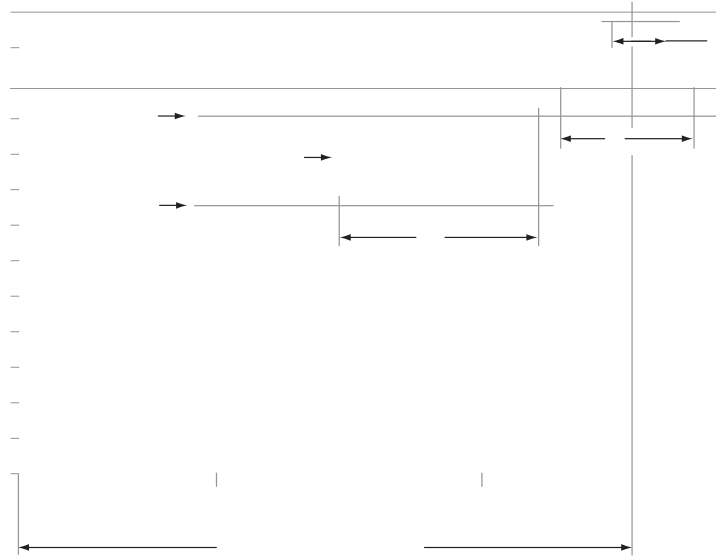


Figure 6. Reflow Profile

H11G1M, H11G2M

ORDERING INFORMATION

Part Number	Package	Shipping†
H11G1M	DIP 6 Pin	50 Units / Tube
H11G1SM	SMT 6 Pin (Lead Bend)	50 Units / Tube
H11G1SR2M	SMT 6 Pin (Lead Bend)	1000 / Tape & Reel
H11G1VM	DIP 6 Pin, DIN EN/IEC60747 5 5 Option	50 Units / Tube
H11G1SVM	SMT 6 Pin (Lead Bend), DIN EN/IEC60747 5 5 Option	50 Units / Tube
H11G1SR2VM	SMT 6 Pin (Lead Bend), DIN EN/IEC60747 5 5 Option	1000 / Tape & Reel
H11G1TVM	DIP 6	

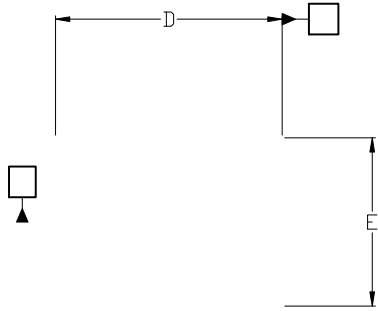
PDIP6 8.51x6.35, 2.54P
CASE 646BX
ISSUE O

DATE 31 JUL 2016

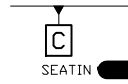
NOTES:

A) NO STANDARD APPL

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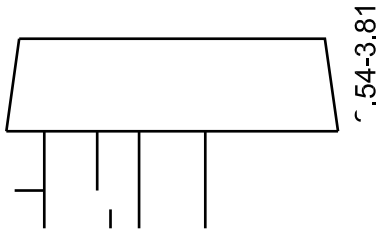
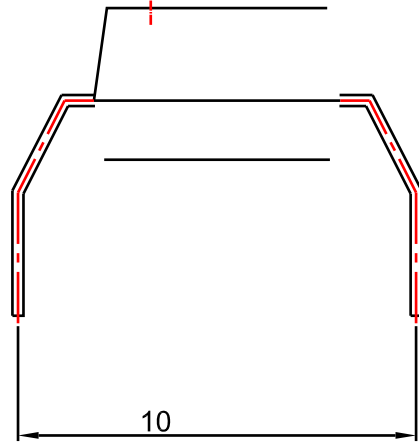
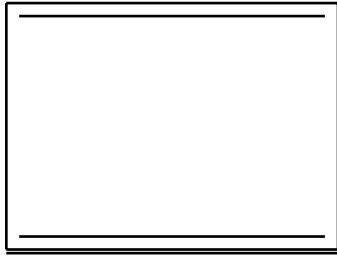


TOP VIEW



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NOTES:
A) NC

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