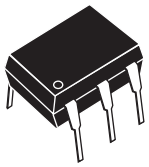
H11C4M

PHOTO SCR OPTOCOUPLER



DIP-6 CASE

Central™ Semiconductor Corp.

DESCRIPTION:

The Central Semiconductor H11C4M is a gallium-arsenide infrared emitting Diode optically coupled with a light activated silicon controlled rectifier in a DIP-6 dual-in-line package. This device is designed for applications requiring a high degree of isolation between triggering and load circuits.

MARKING: H11C4M

APPLICATIONS:

- Communications equipment
- Solid state relays
- Portable equipment
- Low power logic circuits requiring a high degree of input/output isolation

FEATURES:

- Forward current I_F=50mA MAX (Input)
- On-State current $I_{T(RMS)}$=150mA (Input)
- Reverse current I_R=10μA MAX (Input)
- Blocking voltage V_{DRM}, V_{RRM}=400V MAX (Output)
- Isolation test voltage 5000V_{RMS}

MAXIMUM RATINGS: (T_A=25°C)	**SYMBOL**		**UNITS**
Isolation Voltage	V_{ISO}	5000	V_{RMS}
Isolation Resistance (@ V_{IO}=500V)	R_{ISO}	10^{11}	Ω
Operating Temperature Range	T_J	-30 to +100	°C
Storage Temperature Range	T_{stg}	-55 to +125	°C

INPUT MAXIMUM RATINGS (LED): (T_A=25°C)	**SYMBOL**		**UNITS**
Continuous Forward Current	I_F	50	mA
Continuous Reverse Voltage	V_R	5.0	V
Peak Forward Surge Current (tp=1μs)	I_{FSM}	1.0	A
Power Dissipation	P_D	75	mW

OUTPUT MAXIMUM RATINGS (SCR): (T_A=25°C)	**SYMBOL**		**UNITS**
Peak Repetitive Off-State Voltage	V_{DRM}, V_{RRM}	400	V
Peak Reverse Gate Voltage	V_{RGM}	6.0	V
RMS On-State Current	$I_{T(RMS)}$	150	mA
Peak On-State Current (tp=100μs)	I_T	10	A
Peak One Cycle Surge (tp=10ms)	I_{TSM}	5.0	A

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

SYMBOL	**TEST CONDITIONS**	**MIN**	**TYP**	**MAX**	**UNITS**
I_R	V_R=3.0V			10	μA
V_F	I_F=10mA			1.5	V
C_J	V_R=0V, f=1.0MHz		50		pF

Central™
Semiconductor Corp.

H11C4M

PHOTO SCR OPTOCOUPLER

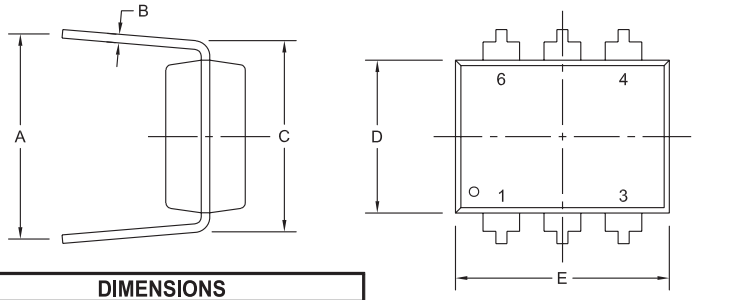
OUTPUT ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I_{DRM}, I_{RRM}	V_{DRM}, V_{RRM}=400V, R_{GK}=10kΩ, T_A=100°C		150	μA
V_{TM}	I_{TM}=100mA		1.3	V
I_{GT}	V_D=100V, R_L=10kΩ		50	μA
V_{GT}	V_D=100V, R_L=10kΩ		1.0	V
I_H	I_T=100mA, R_{GK}=27kΩ		500	μA

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

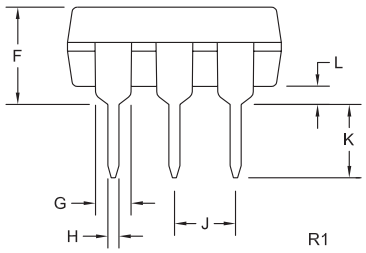
SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
I_{FT}	V_{AK}=50V, R_{GK}=10kΩ		20	mA
I_{FT}	V_{AK}=100V, R_{GK}=27kΩ		11	mA

DIP-6 CASE - MECHANICAL OUTLINE

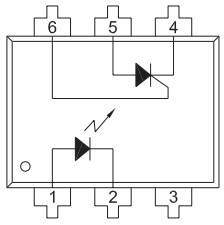


DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	0.300	0.347	7.62	8.81
B	0.008	0.016	0.20	0.41
C	0.300		7.62	
D	0.240	0.270	6.10	6.86
E	0.292	0.308	7.42	7.82
F	0.115	0.200	2.92	5.08
G	0.045	0.070	1.14	1.78
H	0.016	0.022	0.41	0.56
J	0.100		2.54	
K	0.100	0.154	2.54	3.91
L	0.020	-	0.51	-

DIP-6 (REV: R1)



R1



LEAD CODE:
1) ANODE (LED)
2) CATHODE (LED)
3) NO CONNECTION
4) CATHODE (SCR)
5) ANODE (SCR)
6) GATE (SCR)

MARKING: H11C4M

R2 (8-December 2008)