



H11G0F Series

Rev.A.1.0

The products are 5-pin solid-state relay opto-couplers. The device combines an AlGaAs infrared emitting diode as the emitter which is optically coupled to a monolithic silicon zero-crossing photo triac to drive a power triac in a plastic DIP5 package with different lead forming options. The products are widely used in solenoid/valve controls, lighting controls, motor controls, temperature controls, static AC power switches, solid state relays, interfacing microprocessors to 265 V_{AC} peripherals.

High isolation 5000 Vrms

DC input with triac output

Operating temperature range - 40°C to 110 °C

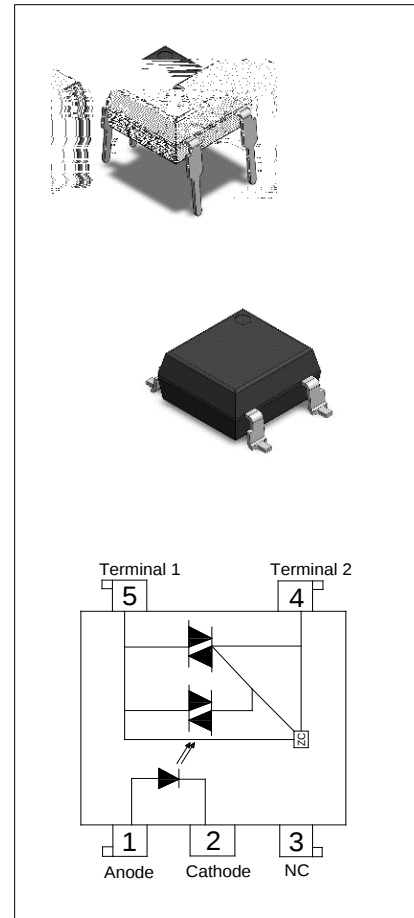
REACH & RoHS compliance

HBM: H3B; MM: M4; CDM: C3

CQC approved

VDE approved

UL approved



(Temperature=25°C)

Parameter		Symbol	Value	Unit
Input	Forward Current	I_F	50	mA
	Peak Forward Current	I_{FP}	1	A
	Reverse Voltage	V_R	6	V
	Power Dissipation	P_D	75	mW
Output	Repetitive peak off-state voltage	V_{DRM}	600	V
	Repetitive peak reverse voltage	V_{RRM}	600	V
	Critical rate of rise of on-state current	di/dt	100	A/s
	On-state RMS Current (T_a)	$I_{T(RMS)}$	0.3	A
	Non repetitive surge peak on-state current (full cycle , $t_p=20ms$)	I_{TSM}	3	A
	junction to case (AC)	$R_{th(j-c)}$	65	/W
Isolation Voltage		V_{iso}	5000	Vrms

Operating Temperature	T_{opr}	-40~110	
Junction Temperature	T_j	125	
Storage Temperature	T_{stg}	-40~125	
Soldering Temperature	T_{sol}	260	
Peak pulse voltage ($T_j=25$; non-repetitive,off-state)	V_{pp}	3	kV

100μs pulse, frequency
AC for 1minute, R.H.=40~60%

(Temperature=25°C)

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Input	Forward Voltage	V_F	$I_F=10mA$	-	1.2	1.5	V
	Reverse Current	I_R	$V_R=6V$	-	-	1	A

Peak Off-state
Current, Eithers (iDi5629</MC-3/P <c)-50.48 9 ET ioC-3/ -1n013 Tw 0.326 0 Td93 0 Td [

Output

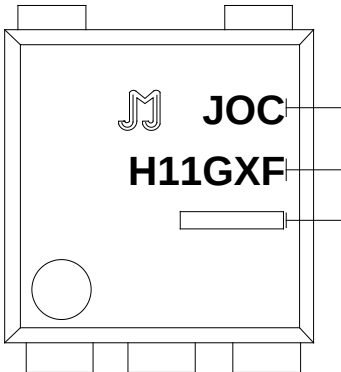
		: Company Abbr. : Part Number & Rank Production Information Code	
	60 Units/Tube	40 Tubes/Inner box	5 Inner box/Outer box =12k Units
	200 Units/Reel	2 Reels/Inner box	5 Inner box/Outer box =12k Units

FIG.1: Max. Allowable LED Forward Current vs. Ambient Temperature

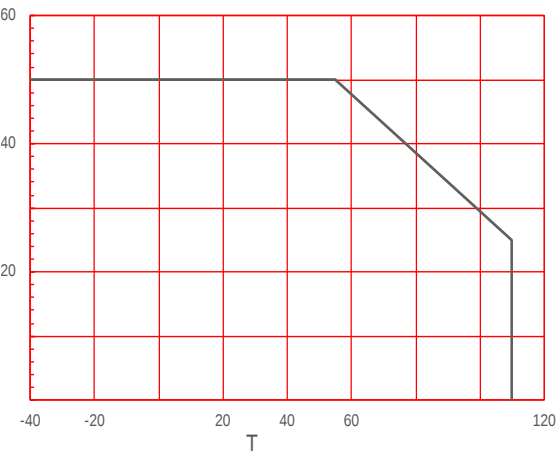


FIG.3: Forward Current vs. Forward Voltage

FIG.2: On-state Terminal Current vs. Ambient Temperature

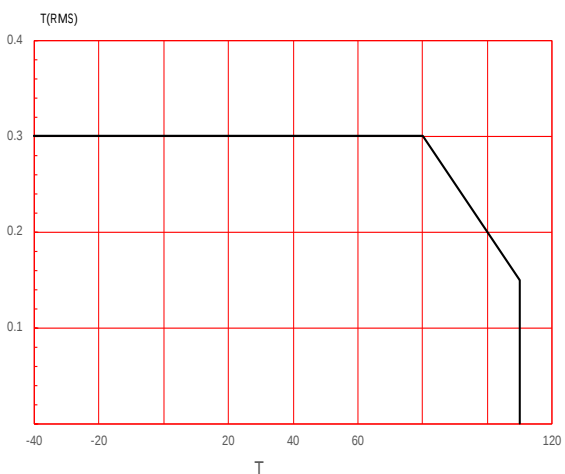


FIG.4: Forward Voltage vs. Ambient Temperature

FIG.7: On-state characteristics

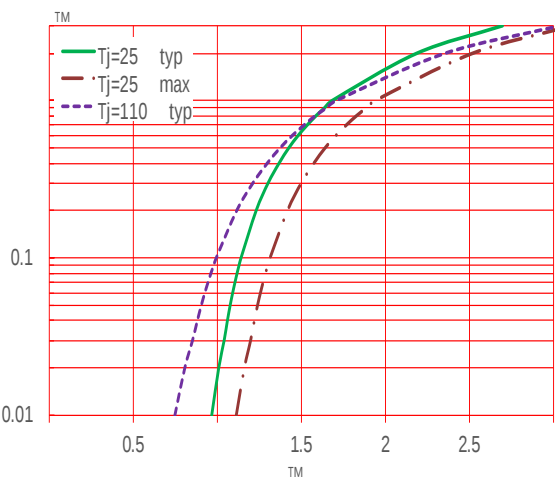


FIG.8: Normalized Holding Current vs. Ambient Temperature

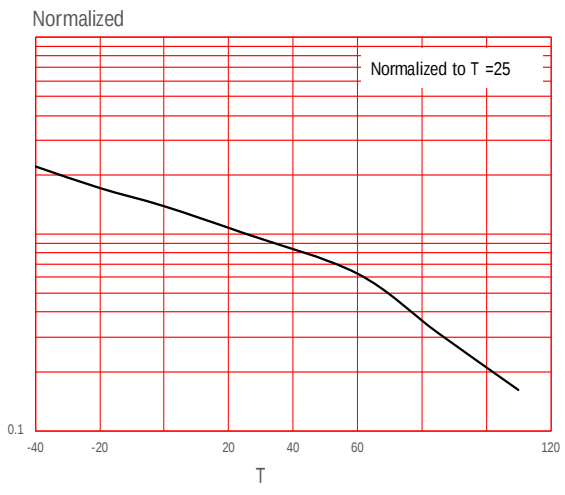


FIG.9: Turn On Time vs. Forward Current

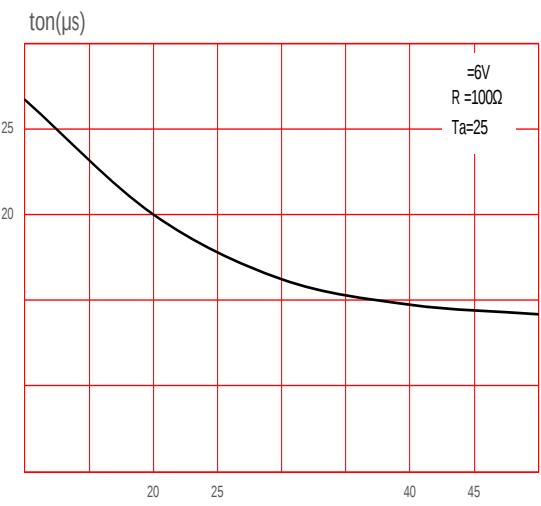


FIG.10: Normalized Inhibit Voltage vs. Ambient Temperature

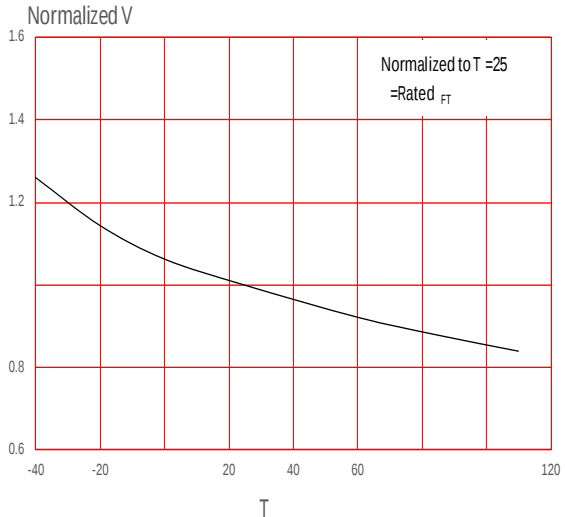
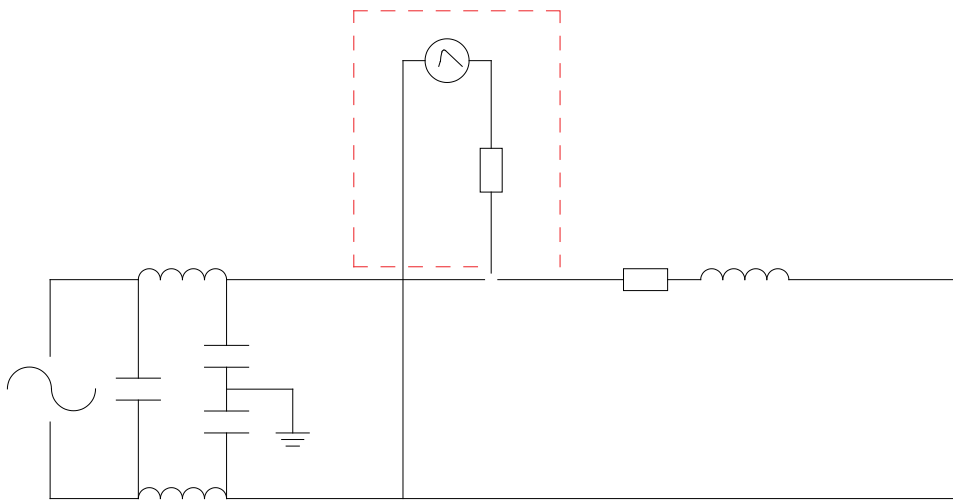
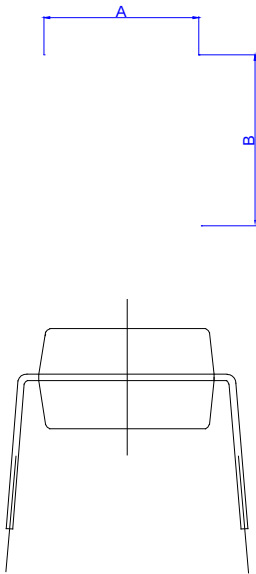
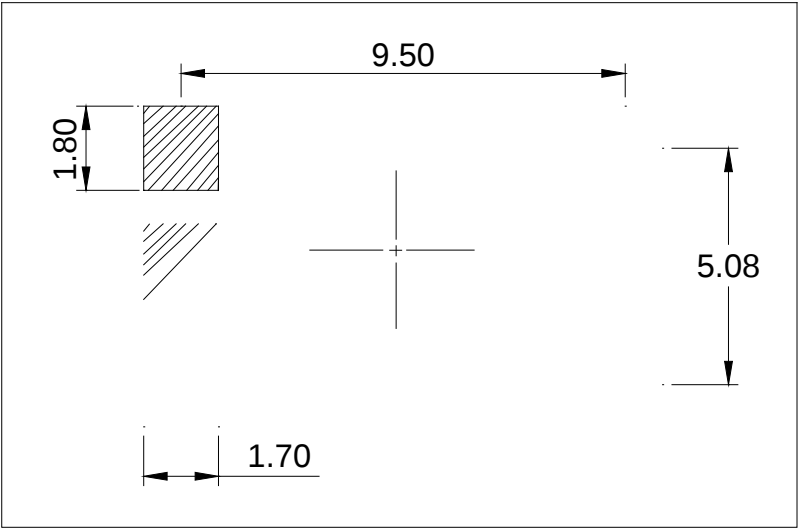


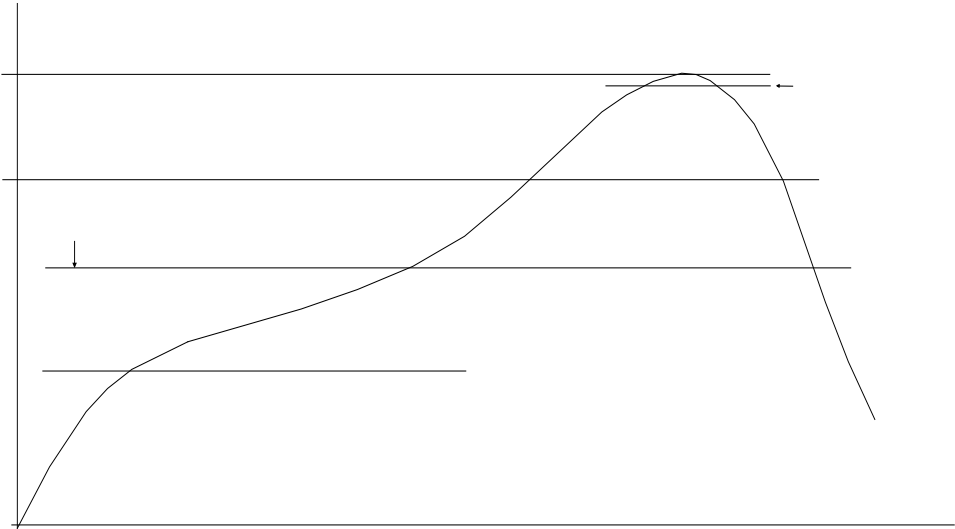
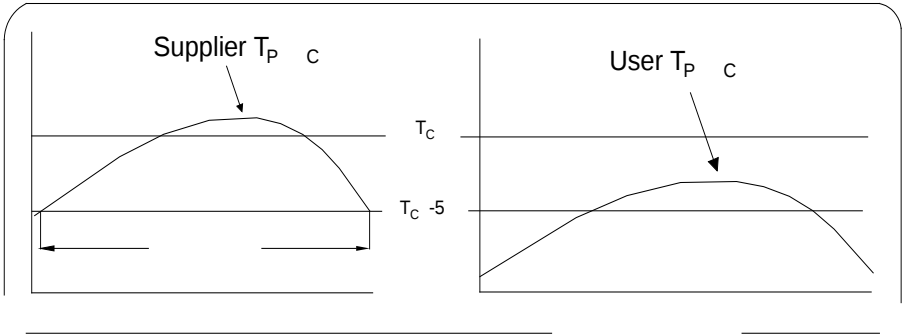
FIG.11: Test Circuits of Turn On Time**FIG.12:** Waveforms of Turn On Time**FIG.13:** Test circuit for inductive and resistive loads to IEC-61000-4-5 standards

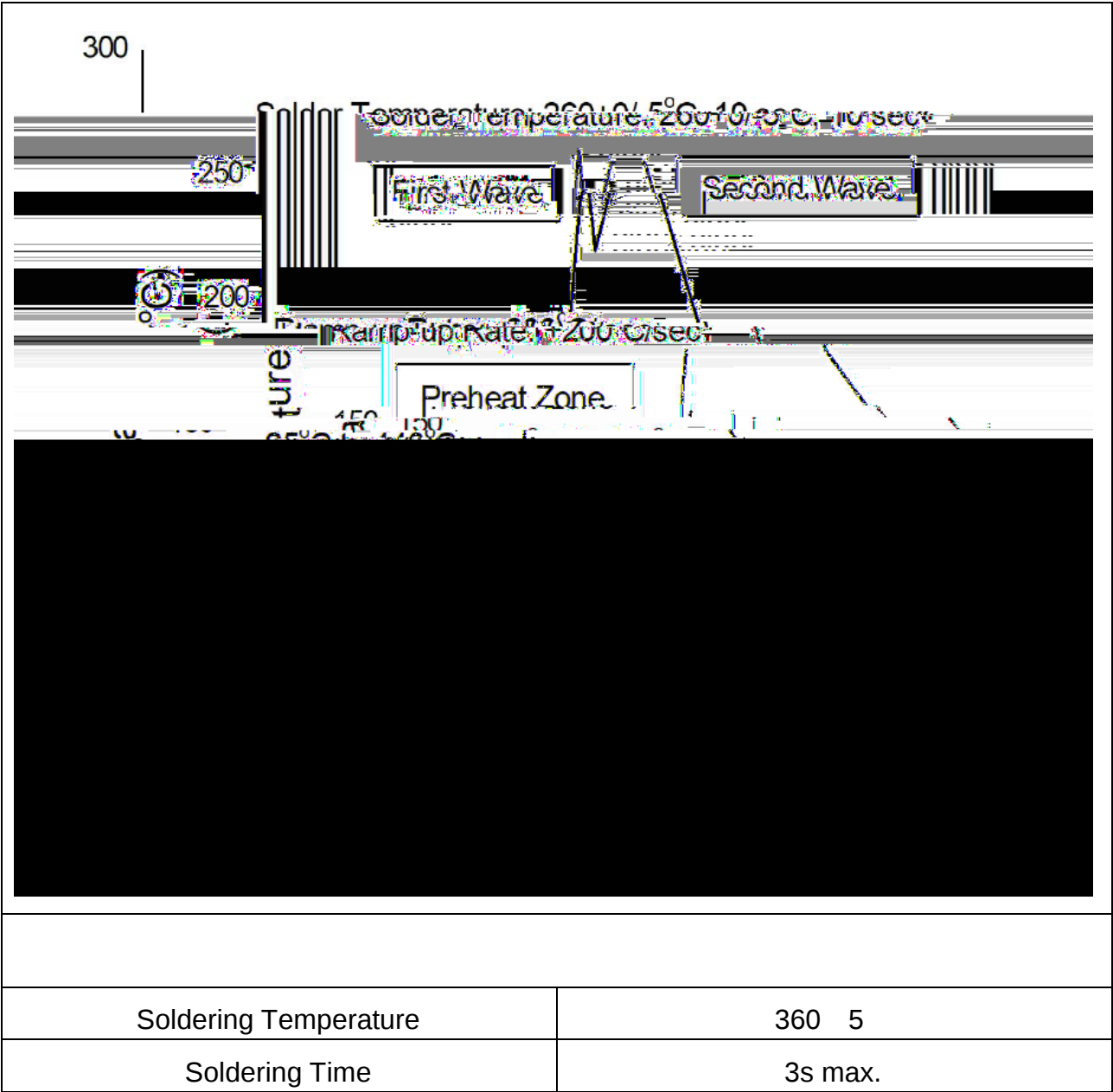
Standard DIP Type:



Option SMD







Note:

1. Reflow soldering is