H11GXF Series

Rev.A.1.1

DESCRIPTION:

The H11GXF series combine 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.

MAIN FEATURES:

High isolation 5000 Vrms
DC input with triac output
Operating temperature range - 40°C to 85 °C
REACH & RoHS compliance
MSL class 2
HBM: H3A; MM: M4
CQC approved
VDE approved
UL approved

ABSOLUTE MAXIMUM RATINGS (Temperature=25°C)

Parameter			Symbol	Value	Unit
Input	Forward Current		I_F	60	mA
	Peak Forward Current		I_{FP}	1 [7]	A
	Reverse Voltage		V_R	6	V
Output	Repetitive peak off-state voltage		V_{DRM}	600	V
	Repetitive peak off-state voltage		V_{RRM}	600	V
	Critical rate of rise of on-state current		dI/dt	70	A s
	On-state RMS Current	H11G0F	$I_{T(RMS)}$	0.3	A
		H11G1F		0.6	

Operating Temperature	T_{opr}

ORDERING AND MARKING INFORMATION

MARKING INFORMATION

Characteristics Curves

FIG.1: Forward Current vs. Ambient Temperature

FIG.2: On-state Terminal Current vs. Ambient Temperature 0

FIG.7: On-state Terminal Voltage vs. Ambient Temperature

FIG.8: Normalized Holding Current vs. Ambient Temperature

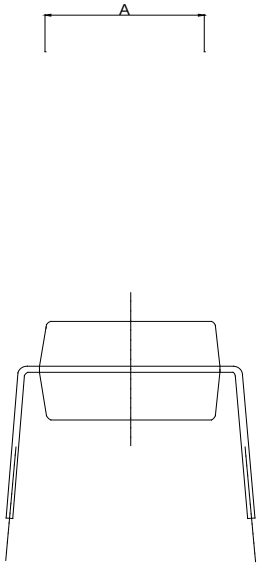
TEST CIRCUITS

FIG.11: Test Circuits of Turn On Time

FIG.12: Waveforms of Turn On Time

Package Dimension (Unit: mm)

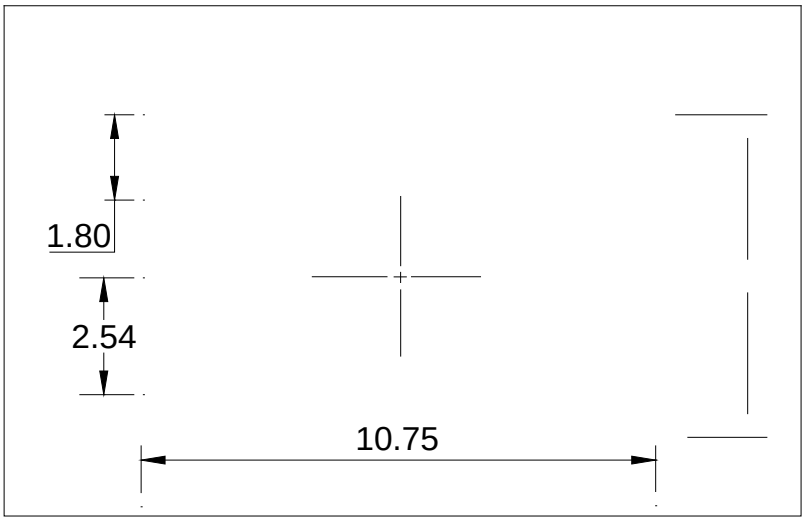
Standard DIP Type:



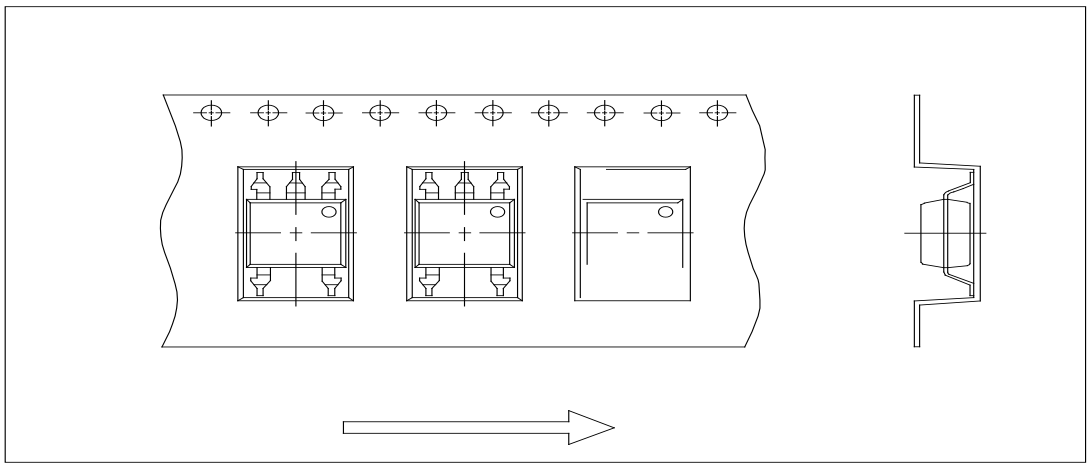
Option SL Type:

RECOMMENDED SOLDER MASK (Dimensions in mm unless otherwise stated)

SL:



Option SLM(T1)



Document Revision History

Date	Revision	Changes
Feb.21, 2025	A.1.0	Last update
Nov.7, 2025	A.1.1	Add (dV/dt)c