TOSHIBA Photocoupler GaAℓAs IRED + Photo IC

TLP350F

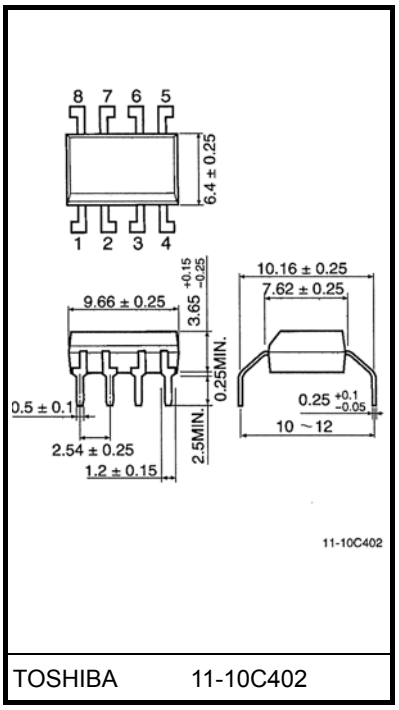
Industrial Inverter

Inverter for Air Conditioner

IGBT/Power MOSFET Gate Drive

IH(Induction Heating)

Unit: mm



TOSHIBA 11-10C402

Weight: 0.54 g (typ.)

The TOSHIBA TLP350F consists of a GaAℓAs light-emitting diode and an integrated photodetector.
This unit is an 8-lead DIP package.
The TLP350F is suitable for gate driving IGBTs or power MOSFETs.
Absolute maximum ratings and electrical characteristics are the same as TLP350technical datasheet.

- Peak output current: I_O = ±2.5A (max)
- Guaranteed performance over temperature: −40 to 100°C
- Supply current:I_{CC} = 2 mA (max)
- Power supply voltage: V_{CC} = 15 to 30 V
- Threshold input current : I_{FLH} = 5 mA (max)
- Switching time (t_{pLH}/t_{pHL}) : 500 ns (max)
- Common mode transient immunity: 15 kV/μs
- Isolation voltage: 3750 Vrms
- UL Recognized : UL1577,File No.E67349
- Option(D4)

  VDE Approved : DIN EN 60747-5-2

  Maximum Operating Insulation Voltage : 1140V_{PK}

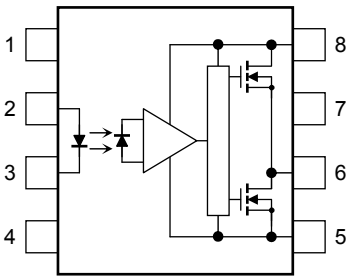
  Highest Permissible Over Voltage : 6000V_{PK}

  (Note): When an EN60747-5-2 approved type is needed, Please designate "Option(D4)"

- Construction mechanical rating

	7.62mm pitch TLP350 type	10.16mm pitch TLP350F type
Creepage distance	6.4 mm (min)	8.0 mm (min)
Clearance	6.4 mm (min)	8.0 mm (min)
Insulation thickness	0.4 mm (min)	0.4 mm (min)

Pin Configuration (top view)

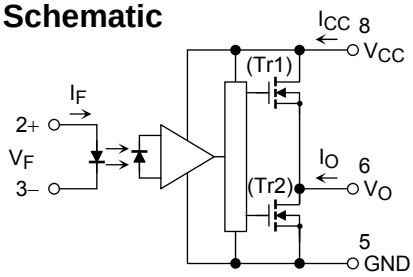


1: NC
2: Anode
3: Cathode
4: NC
5: GND
6: V_O (output)
7: NC
8: V_{CC}

Truth Table

Input	LED	Tr1	Tr2	Output
H	ON	ON	OFF	H
L	OFF	OFF	ON	L

Schematic



A 0.1 μF bypass capacitor must be connected between pins 8 and 5. (See Note 6)

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