

TOSHIBA Photocoupler GaAlAs IRED + Photo IC

TLP350F

Industrial Inverter
 Inverter for Air Conditioner
 IGBT/Power MOSFET Gate Drive
 IH(Induction Heating)

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 TLP350 technical datasheet.

- Peak output current: $I_O = \pm 2.5A$ (max)
- Guaranteed performance over temperature: -40 to $100^\circ C$
- 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)"

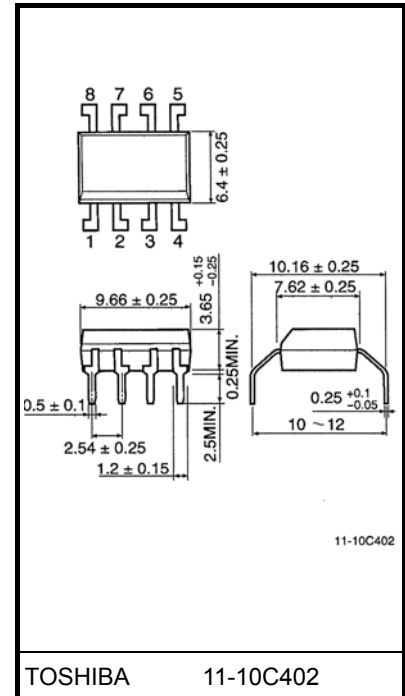
- Construction mechanical rating

| | 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) |

Truth Table

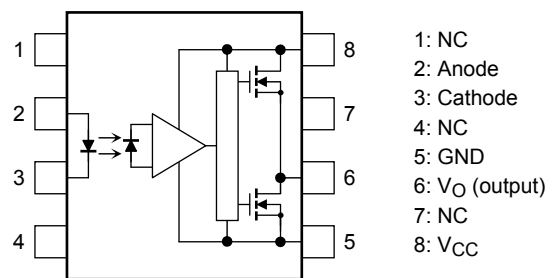
| Input | LED | Tr1 | Tr2 | Output |
|-------|-----|-----|-----|--------|
| H | ON | ON | OFF | H |
| L | OFF | OFF | ON | L |

Unit: mm

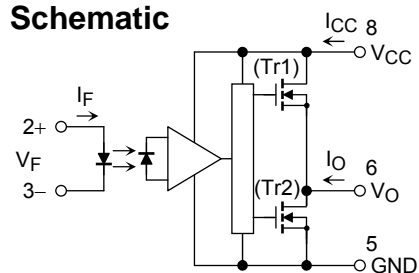


Weight: 0.54 g (typ.)

Pin Configuration (top view)



Schematic



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

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