

TOSHIBA Photocoupler GaAlAs Ired & Photo-IC

TLP251F

Inverter For Air Conditionor
 Induction Heating
 Transistor Inverter
 Power MOS FET Gate Drive
 IGBT Gate Drive

The TOSHIBA TLP251F consists of a GaAlAs light emitting diode and a integrated photodetector.
 This unit is 8-lead DIP package.
 TLP251F is suitable for gate driving circuit of IGBT or power MOS FET.
 Especially TLP251 is capable of "direct" gate drive of lower power IGBTs.
 (~15A)

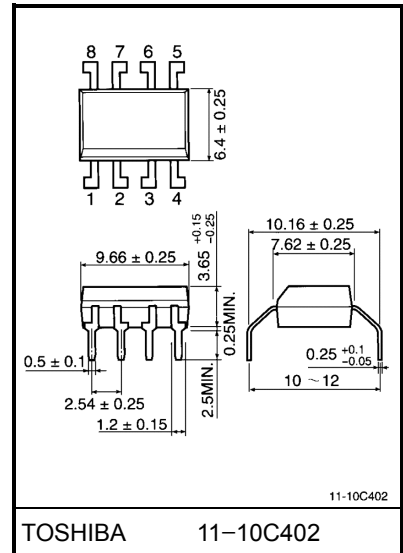
- Input threshold current: $I_F = 5\text{mA}$ (max.)
- Supply current: 11mA (max.)
- Supply voltage: 10~35V
- Output peak current: $\pm 0.4\text{A}$ (max.)
- Switching time: $t_{pHL}, t_{pLH} = 1\mu\text{s}$ (max.)
- Isolation voltage: $2500V_{\text{rms}}$ (min.)
- UL recognized: UL1577, file no. E67349
- Option (D4) type

VDE approved: DIN VDE0884 / 06.92, certificate no. 87447
 Maximum operating insulation voltage: 1140V_{PK}
 Highest permissible over voltage: 6000V_{PK}

**(Note 1) When a VDE0884 approved type is needed,
 please designate the " Option (D4) "**

- Structural parameter
 Creepage distance: 8.0mm (min.)
 Clearance: 8.0mm (min.)

Unit in mm



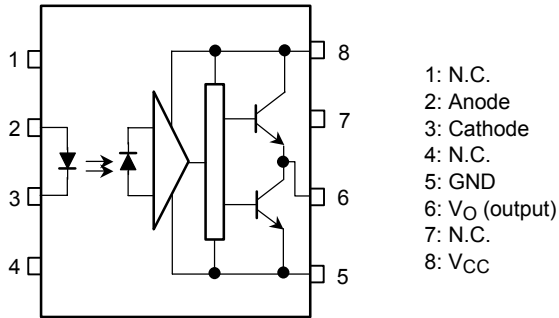
TOSHIBA 11-10C402

Weight: 0.54g

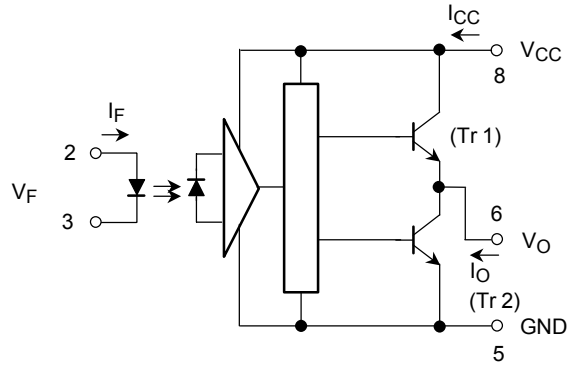
Truth Table

| | | | |
|-----------|-----|-----|-----|
| | | Tr1 | Tr2 |
| | | On | Off |
| Input LED | On | On | Off |
| | Off | Off | On |

Pin Configuration (top view)



Schematic



(Note 2) A $0.1\mu F$ bypass capacitor must be connected between pin 8 and 5.

RESTRICTIONS ON PRODUCT USE

000707EBC

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