

TOSHIBA PHOTOCOUPLER GaAs IRED & PHOTO-IC

TLP251F

- INVERTER FOR AIR CONDITIONOR
- INDUCTION HEATING
- TRANSISTOR INVERTER
- POWER MOS FET GATE DRIVE
- IGBT GATE DRIVE

Unit in mm

The Toshiba TLP251F consists of a GaAs 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 : $2500V_{rms}$ (Min.)
- UL Recognized : UL1577, File No.E67349
- Option (D4) type

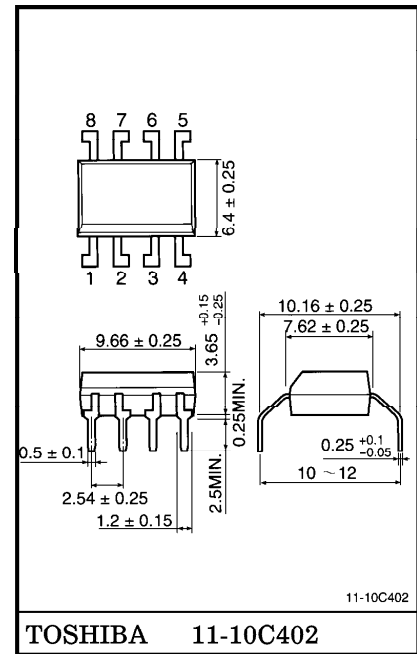
VDE Approved : DIN VDE0884 / 06.92, Certificate No.87447

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.)



Weight : 0.54g

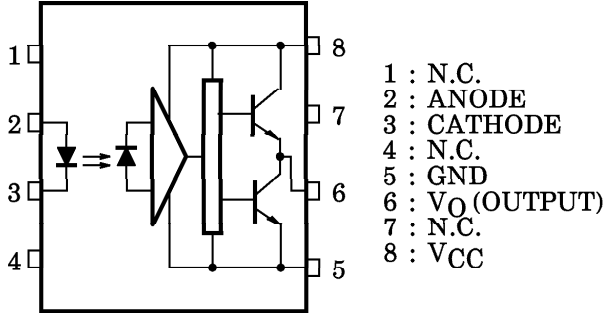
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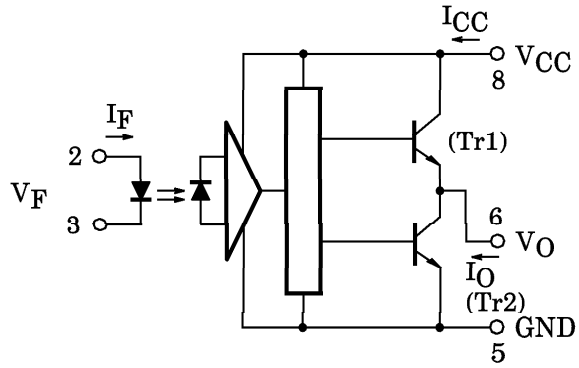
TRUTH TABLE

| | | Tr1 | Tr2 |
|-----------|-----|-----|-----|
| Input LED | ON | ON | OFF |
| | OFF | OFF | ON |

PIN CONFIGURATION (TOP VIEW)



SCHMATIC



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