TOSHIBA Photocoupler GaAlAs Ired & Photo-IC

# TLP251F

Inverter for Air Conditioner Induction Heating Transistor Inverter Power MOSFET Gate Drive IGBT Gate Drive

The TOSHIBA TLP251F consists of a GaAlAs light emitting diode and an integrated photodetector.

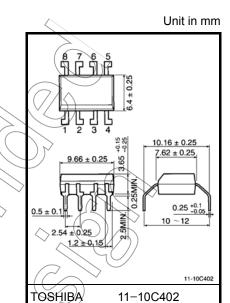
This unit is 8-lead DIP package.

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:  $I_F = 5mA (max.)$
- Supply current: 11mA (max.)
- Supply voltage: 10~35V
- Output peak current: ±0.4A (max.)
- Switching time: t<sub>pHL</sub>, t<sub>pLH</sub> = 1µs (max.)
- Isolation voltage: 2500V<sub>rms</sub>(min.)
- UL recognized: UL1577, file no. E67349
- Option (D4) type
  - VDE approved: DIN EN 60747-5-2, certificate no. 40011913 Maximum operating insulation voltage: 1140VpK Highest permissible over voltage: 6000VpK

(Note 1) When a EN 60747-5-2 approved type is needed, please designate the "Option (D4) "

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



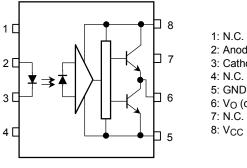
Weight: 0.54 g (typ.)

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### **Truth Table**

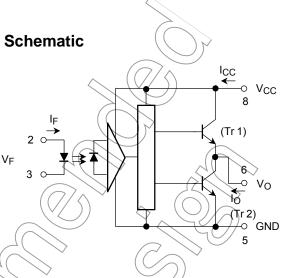
		Tr1	Tr2
Input LED	On	On	Off
	Off	Off	On

### Pin Configuration (top view)



2: Anode 3: Cathode 5: GND 6: V<sub>O</sub> (output)

VF



(Note 2) A 0.1µF bypass capacitor must be connected between pin 8 and 5.

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