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. ( to 15A)

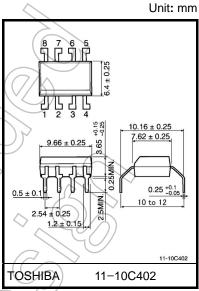
- Input threshold current: IF = 5mA (max.)
- Supply current: 11mA (max.)
- Supply voltage: 10 to 35V
- Output peak current: ±0.4A (max.)
- Switching time:  $t_{pHL}$ ,  $t_{pLH} = 1\mu s$  (max.)
- Isolation voltage: 2500V<sub>rms</sub>(min.)
- UL recognized: UL1577, file no. E67349
- cUL approved :CSA Component Acceptance Service No. 5A, File No.E67349
- Option (D4) type

VDE approved: DIN EN 60747-5-5, certificate no. 40011913 Maximum operating insulation voltage: 1140Vpk Highest permissible over voltage: 6000Vpk

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

• Structural parameter

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

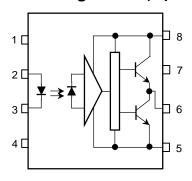


Weight: 0.54 g (typ.)

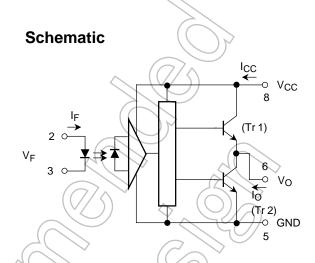
#### **Truth Table**

		Tr1	Tr2
Input LED	On	On	Off
	Off	Off	On

### Pin Configuration (top view)



- 1: N.C.
- 2: Anode
- 3: Cathode 4: N.C.
- 5: GND
- 6: V<sub>O</sub> (output) 7: N.C.
- 8: V<sub>CC</sub>



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

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