Unit in mm

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: IF = 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 VDE0884 / 06.92, certificate no. 87447 Maximum operating insulation voltage: 1140VPK Highest permissible over voltage: 6000VPK

# (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.)

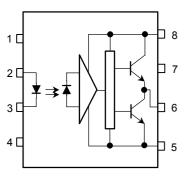
8 7 6 5 1 2 3 4 9.66 ± 0.25 93 0.5 ± 0.1 10.16 ± 0.25 10.16 ± 0.25 7.62 ± 0.25 10.16 ± 0.25 10.16 ± 0.25 10.16 ± 0.25 10.16 ± 0.25 10.16 ± 0.25 10.16 ± 0.25 10.16 ± 0.25 10.16 ± 0.25 10.16 ± 0.25 10.16 ± 0.25 10.16 ± 0.25

Weight: 0.54g

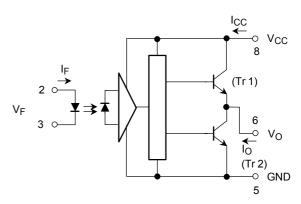
#### **Truth Table**

		Tr1	Tr2
Input LED	On	On	Off
	Off	Off	On

### Pin Configuration (top view)



### **Schmatic**



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

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>

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000707EBC

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