

TOSHIBA Photocoupler GaAlAs Ired & Photo-IC

# TLP251F

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

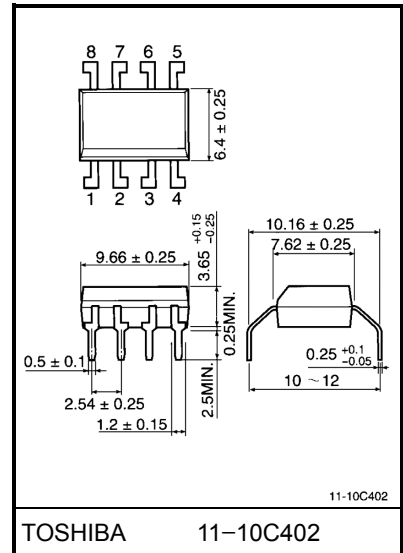
The TOSHIBA TLP251F consists of a GaAlAs light emitting diode and a integrated photodetector.  
 This unit is 8-lead DIP package.  
 TLP251F is suitable for gate driving circuit of IGBT or power MOS FET.  
 Especially TLP251 is capable of "direct" gate drive of lower power IGBTs.  
 (~15A)

- 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<sub>PK</sub>  
 Highest permissible over voltage: 6000V<sub>PK</sub>

**(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

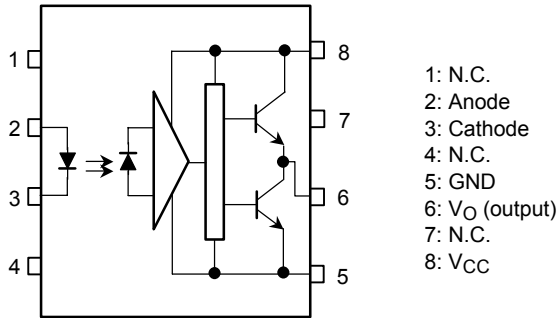


TOSHIBA 11-10C402  
 Weight: 0.54g

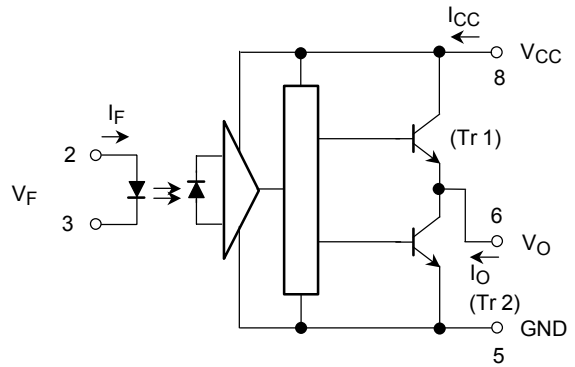
## Truth Table

		Tr1	Tr2
		On	Off
Input LED	On	On	Off
	Off	Off	On

## Pin Configuration (top view)



## Schematic



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

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000707EBC

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