

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: $I_F = 5\text{mA}$ (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 EN 60747-5-2, certificate no. 40011913

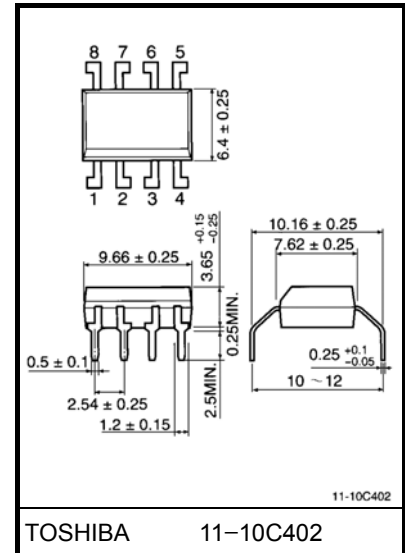
Maximum operating insulation voltage: 1140V_{PK}

Highest permissible over voltage: 6000V_{PK}

(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.)

Unit in mm



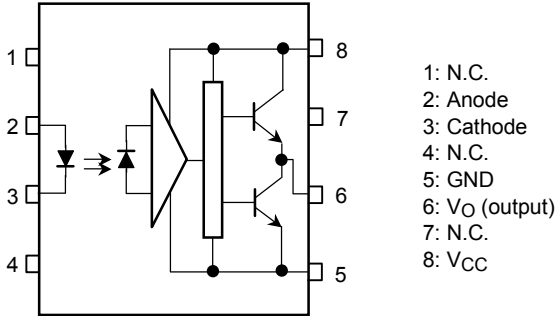
TOSHIBA 11-10C402

Weight: 0.54 g (typ.)

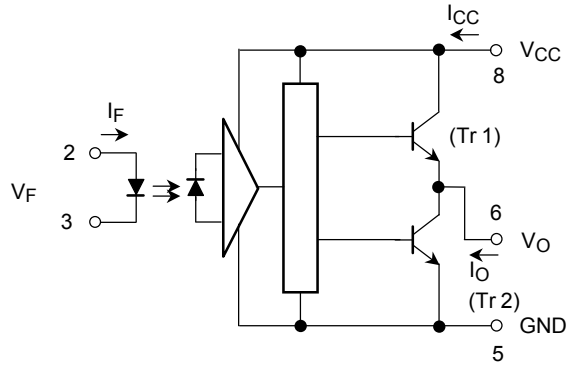
Truth Table

		Tr1	Tr2
		Input LED	On
	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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