## TOSHIBATLP620(D4)SERIES,TLP621(D4)SERIES,TLP750(D4)SERIES

### **TOSHIBA Photocoupler**

## TLP620(D4)SERIES,TLP621(D4)SERIES,TLP750(D4)SERIES

Attachment: Specifications for VDE0884 option: (D4)

Types: TLP620, TLP620-2, TLP620-4, TLP621, TLP621-2, TLP621-4, TLP750, TLP751

Type designations for 'option :  $(\underline{D4})$ ', which are tested under VDE0884 requirements.

Ex.: TLP621 (D4-GR-LF2) D4: VDE0884 option

GR: CTR rank

LF2: Standard lead bend

Note: Use TOSHIBA standard type number for safety standard application.

Ex. TLP621 (D4–GR–LF2)  $\rightarrow$  TLP621

### **VDE0884 Isolation Characteristics**

Description	Symbol	Rating	Unit
Application classification (DIN VDE0109 / 12.83, table 1) for rated mains voltage ≤ 300 V <sub>rms</sub> for rated mains voltage ≤ 600 V <sub>rms</sub>		I–IV I–III	_
Climatic classification (DIN IEC68 teil 1 / 09.80)		55 / 100 / 21	_
Pollution degree (DIN VDE0109 / 12.83)		2	_
Maximum operating insulation voltage	V <sub>IORM</sub>	890	Vpk
Input to output test voltage, method A  Vpr = 1.5×V <sub>IORM</sub> , type and sample test t <sub>P</sub> = 60s, partial discharge < 5pC	Vpr	1335	Vpk
Input to output test voltage, method B  Vpr = 1.875×V <sub>IORM</sub> , 100% production test t <sub>P</sub> = 1s, partial discharge < 5pC	Vpr	1670	Vpk
Highest permissible overvoltage (transient overvoltage, t <sub>pr</sub> = 10s)	V <sub>TR</sub>	8000	Vpk
Safety limiting values (max. permissible ratings in case of fault, also refer to thermal derating curve) current (input current $I_F$ , $P_{Si} = 0$ ) power (output or total power dissipation) temperature	I <sub>si</sub> Psi Tsi	300 500 150	mA mW °C
Insulation resistance at Tsi, V <sub>IO</sub> = 500V	R <sub>si</sub>	≥10 <sup>9</sup>	Ω

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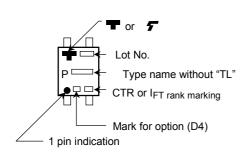
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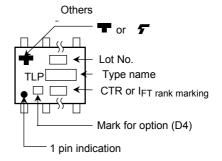
## **Insulation Related Specifications**

Minimum creepage distance (*)	Cr	7. 0 mm
Minimum clearance (*)	CI	7. 0 mm
Minimum insulation thickness	ti	0.5 mm
Comperative tracking index (DIN IEC112 / VDE0303, part 1)	СТІ	175 (VDE0109 / 12.83 group III a)

- ((\*) in accordance with DIN VDE0109 / 12.83, table 2, & 4)
  - (\*1) If a printed circuit is incorporated, the creepage distance and clearance may be reduced below this value (e. g. at a standard distance between soldering eye centres of 7.5 mm). If this is not permissible, the user shall take suitable measures.
  - (\*2) This photocoupler is suitable for 'safe electrical isolation' only within the safety limit data. Maintenance of the safety data shall be ensured by means of protective circuits.

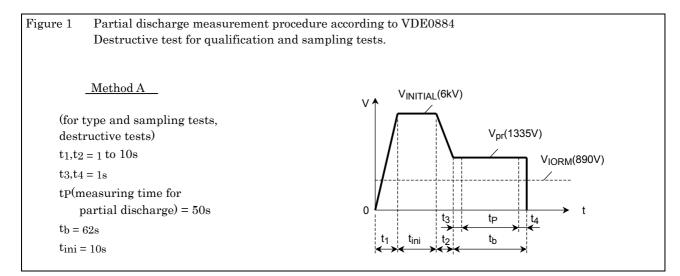
Marking example: 4 pin type

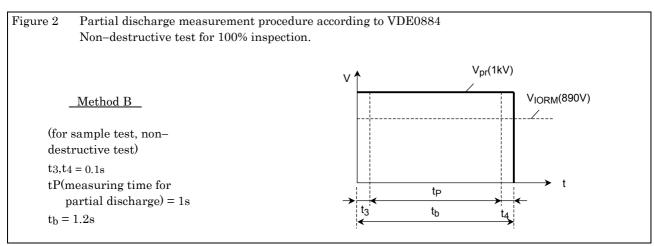


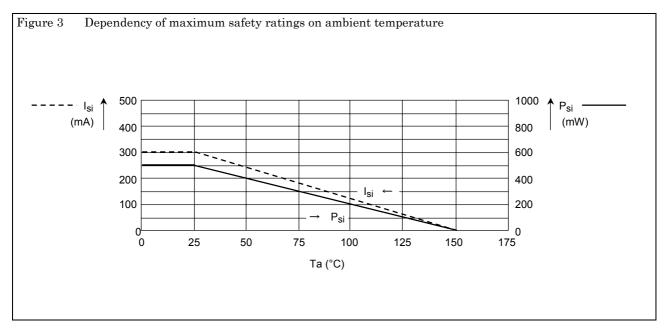


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