

TOSHIBA

TLP762J(D4)SERIES,TLP763J(D4)SERIES

TOSHIBA PHOTOCOUPLER

TLP762J(D4), TLP762JF(D4), TLP763J(D4), TLP763JF(D4)

ATTACHMENT : SPECIFICATIONS FOR VDE0884 OPTION : (D4)

Types : TLP762J, TLP762JF, TLP763J, TLP763JF

Type designations for 'Option : (D4)', which are tested under VDE0884 requirements.

Ex. : TLP762J (D4-LF1) D4 : VDE0884 option
LF1 : lead bend

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

Ex. TLP762J (D4-LF1) → TLP762J



VDE0884 ISOLATION CHARACTERISTICS

DESCRIPTION	SYMBOL	RATING	UNIT
Application Classification (DIN VDE0110 Teil 2/01.89, Table 1) for rated mains voltage $\leq 300 \text{ V}_{\text{RMS}}$ for rated mains voltage $\leq 600 \text{ V}_{\text{RMS}}$		I-IV I-III	—
Climatic Classification (DIN IEC68 Teil 1/09.80)		40/100/21	—
Pollution Degree (DIN VDE0110 Teil 2/01.89)		2	—
Maximum Operating Insulation Voltage	V_{IORM}	1130	Vpk
Input to output Test Voltage, Method A $V_{\text{pr}} = 1.5 \times V_{\text{IORM}}$ Type and Sample Test $t_{\text{p}} = 60\text{s}$, Partial Discharge $< 5\text{pC}$	V_{pr}	1695	Vpk
Input to output Test Voltage, Method B $V_{\text{pr}} = 1.875 \times V_{\text{IORM}}$, 100% Production Test $t_{\text{p}} = 1\text{s}$, Partial Discharge $< 5\text{pC}$	V_{pr}	2120	Vpk
Highest Permissible Overvoltage (Transient Overvoltage, $t_{\text{pr}} = 10\text{s}$)	V_{TR}	6000	Vpk
Safety Limiting Values (Max. permissible ratings in case of fault, also refer to thermal derating curve) Current (Input current I_{F} , $\text{Psi} = 0$) Power (Output or Total Power Dissipation) Temperature	I_{si} Psi T_{si}	400 700 150	mA mW °C
Insulation Resistance, $V_{\text{IO}} = 500\text{V}$, $T_{\text{a}} = 25^{\circ}\text{C}$ $V_{\text{IO}} = 500\text{V}$, $T_{\text{a}} = T_{\text{si}}$	R_{si}	$\geq 10^{12}$ $\geq 10^9$	Ω

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INSULATION RELATED SPECIFICATIONS

		 7.62mm pitch TLPxxx type	 10.16mm pitch TLPxxxF type
Minimum Creepage Distance (*)	Cr	7.0mm	8.0mm
Minimum Clearance (*)	Cl	7.0mm	8.0mm
Minimum Insulation Thickness	ti	0.5mm	
Comperative Tracking Index (DIN IEC112 / VDE0303, Part 1)	CTI	175 (VDE0110 Teil 2 / 01.89 Group III a)	

(*) in accordance with DIN VDE0110 Teil 2 / 01.89, 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 7.5mm). 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.

VDE Test sign : Marking on product
for VDE0884



Marking on packing
for VDE0884



Marking Example :

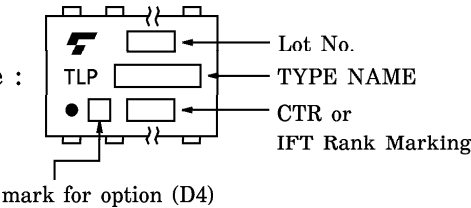


Figure 1 Partial discharge measurement procedure according to VDE0884
Destructive test for qualification and sampling tests.

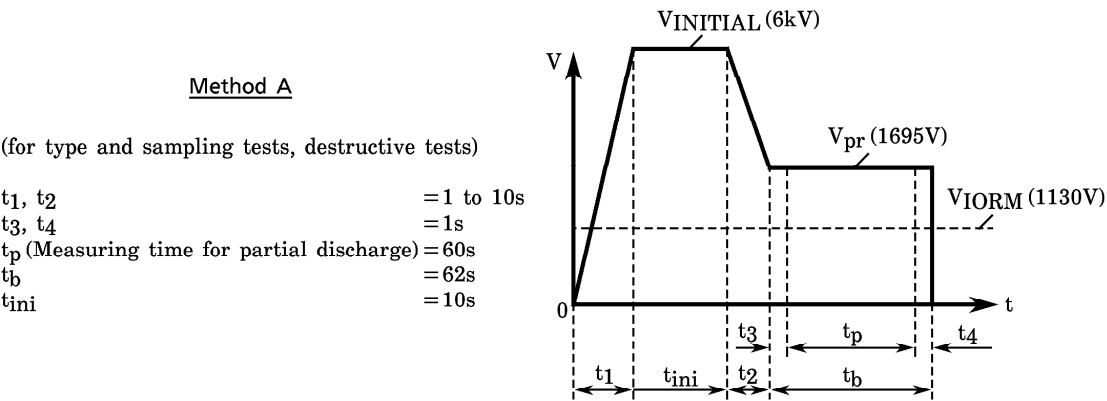


Figure 2 Partial discharge measurement procedure according to VDE0884
Non-destructive test for 100% inspection.

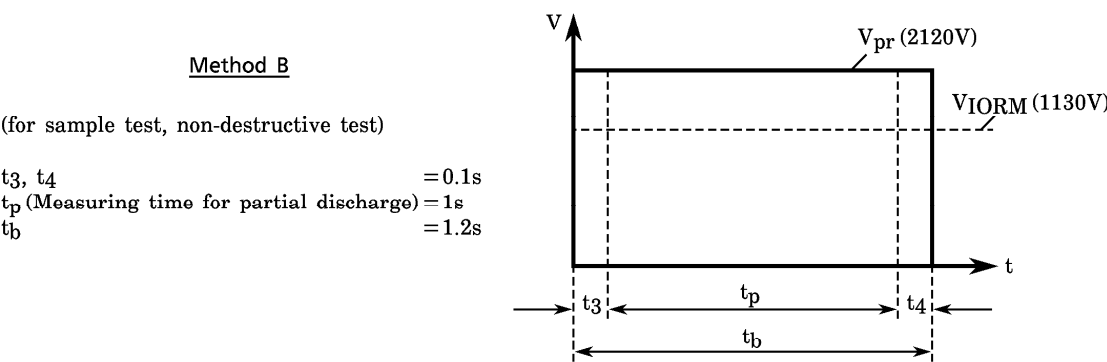


Figure 3 Dependency of maximum safety ratings on ambient temperature

