

(As per DIN EN/IEC 60747–5–5, this optocoupler is suitable for "safe electrical insulation" only within the safety limit data. Compliance with the safety ratings shall be ensured by means of protective circuits.)

Installation Classifications per DIN VDE	<150 V _{RMS}	I–IV
0110/1.89 Table 1, For Rated Mains Voltage	<300 V _{RMS}	I–III
Climatic Classification		40/110/21
Pollution Degree (DIN VDE 0110/1.89)		2
Comparative Tracking Index		175

V _{PR}	Input-to-Output Test Voltage, Method A, $V_{IORM} \times 1.6 = V_{PR}$, Type and Sample Test with $t_m = 10 \text{ s}$, Partial Discharge <5 pC	904	V _{peak}
	Input-to-Output Test Voltage, Method B, $V_{IORM} \times 1.875 = V_{PR}$, 100% Production Test with $t_m = 1$ s, Partial Discharge < 5 pC	1060	V _{peak}
V _{IORM}	Maximum Working Insulation Voltage	565	V_{peak}
V _{IOTM}	Highest Allowable Over-Voltage	4000	V_{peak}
	External Creepage	≥5	mm
	External Clearance	≥5	mm
DTI	Distance Through Insulation (Insulation Thickness)	≥0.4	mm
T _S	Case Temperature (Note 1)	150	°C
I _{S,INPUT}	Input Current (Note 1)	200	mA
P _{S,OUTPUT}	Output Power (Note 1)	300	mW
R _{IO}	Insulation Resistance at T _S , V _{IO} = 500 V (Note 1)	>109	Ω

^{1.} Safety limit values – maximum values allowed in the event of a failure.

1	ANODE	Anode
3	CATHODE	Cathode
4	GND	Output Ground
5	V _O	Output Voltage
6	V_{DD}	Output Supply Voltage

(T_A = 25°C, unless otherwise noted)

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T _{STG}	Storage Temperature	-40 to +125	°C
T _{OPR}	Operating Temperature	-40 to +110	°C
T_J	Junction Temperature	-40 to +125	°C
T _{SOL}	Lead Solder Temperature (Refer to Reflow Temperature Profile)	260 for 10 s	°C
IF	Forward Current	20	mA
V _R	Reverse Voltage	5	V
V _{DD}	Supply Voltage	0 to 6.0	V
Vo	Output Voltage	-0.5 to V _{DD} + 0.5	V
IO	Average Output Current	10	mA
PDI	Input Power Dissipation (Note 2, 4)	40	mW
PDO	Output Power Dissipation (Note 3, 4)	70	mW

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

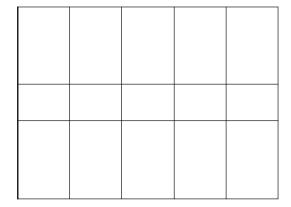
- Derate linearly from 95°C at a rate of -1.4 mW/°C.
 Derate linearly from 100°C at a rate of -3.47 mW/°C.
- 4. Functional operation under these conditions is not implied. Permanent damage may occur if the device is subjected to conditions outside these ratings.

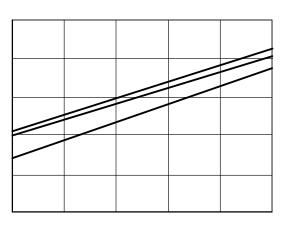
T _A	Ambient Operating Temperature	-40	+110	°C
V_{DD}	Supply Voltages (Note 5)	3.0	5.5	V
V_{FL}	Logic Low Input Voltages	0	0.8	V
I _{FH}	Logic High Input Current	5	16	mA
I _{OL}	Logic Low Output Current	0	7	mA

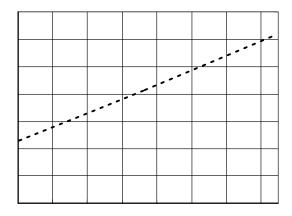
Functional operation above the stresses listed in the Recommended Operating Ranges is not implied. Extended exposure to stresses beyond the Recommended Operating Ranges limits may affect device reliability.

5. $0.1 \,\mu\text{F}$ bypass capacitor must be connected between 4 and 6.

Apply over all recommended conditions ($T_A = -40^{\circ}C$ to +110°C, 3.0 V \leq V _{DD} \leq 5.5 V unless otherwise specified.) All typical values are measured at $T_A = 25^{\circ}C$ and $V_{DD} = 3.3$ V.	







Max. Ramp-up Rate = 3° C/s Max. Ramp-down Rate = 6° C/s

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