



ELECTRICAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)							
PARAMETER	TEST CONDITION	PART	SYMBOL	MIN.	TYP.	MAX.	UNIT
INPUT							
Reverse current	$V_R = 6\text{ V}$		I_R			10	μA
Forward voltage	$I_F = 30\text{ mA}$		V_F		1.2	1.5	V
OUTPUT							
Leakage with LED off, either direction	$V_{DRM} = 600\text{ V}$		I_{DRM}		10	500	nA
Critical rate of rise off-state voltage	$V_D = 400\text{ V}$		dV/dt_{cr}	1500	2000		V/ μs
COUPLER							
LED trigger current, current required to latch output		VO3053	I_{FT}			5	mA
		VO3052	I_{FT}			10	mA
Peak on-state voltage, either direction	$I_{TM} = 100\text{ mA peak}$, $I_F = \text{rated } I_{FT}$		V_{TM}		1.7	3	V
Holding current, either direction			I_H		200		μA
Coupling capacitance	10 KHz		C_{IO}		0.4		pF

Note

- Typical values are characteristics of the device and are the result of engineering evaluations. Typical values are for information only and are not part of the testing requirements.

SAFETY AND INSULATION RATINGS						
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	
Climatic classification (according to IEC 68 part 1)			55/100/21			
Pollution degree (DIN VDE 0109)			2			
Comparative tracking index	CTI	175				
Peak transient overvoltage	V_{IOTM}	8000			V_{peak}	
Peak working insulation voltage	V_{IORM}	890			V_{peak}	
Isolation resistance at $T_{amb} = 100\text{ }^{\circ}\text{C}$, $V_{DC} = 500\text{ V}$	R_{IO}	10^{11}			Ω	
Isolation resistance at $T_{amb} = 25\text{ }^{\circ}\text{C}$, $V_{DC} = 500\text{ V}$	R_{IO}	10^{12}			Ω	
Partial discharge test voltage (method a, $V_{pd} = V_{IORM} \times 1.875$)	V_{pd}	1669			V_{peak}	
Safety rating - power	P_{SO}			500	mW	
Safety rating - input current	I_{SI}			250	mA	
Safety rating - temperature	T_{SI}			175	$^{\circ}\text{C}$	
Clearance distance (Standard DIP-6)		7			mm	
Creepage distance (Standard DIP-6)		7			mm	
Clearance distance (400 mil DIP-6)		8			mm	
Creepage distance (400 mil DIP-6)		8			mm	

Note

- According to DIN EN60747-5-5 (see figure 4). This optocoupler is suitable for safe electrical isolation only within the safety ratings. Compliance with the safety ratings shall be ensured by means of suitable protective circuits.

TYPICAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)

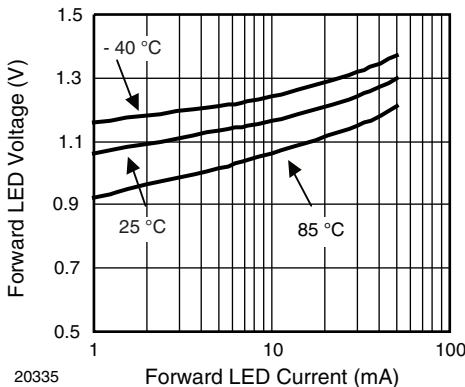


Fig. 1 - Forward Voltage vs. Forward Current

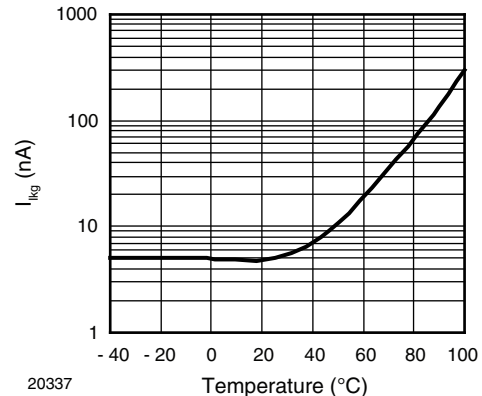


Fig. 2 - Off-State Leakage Current vs. Temperature

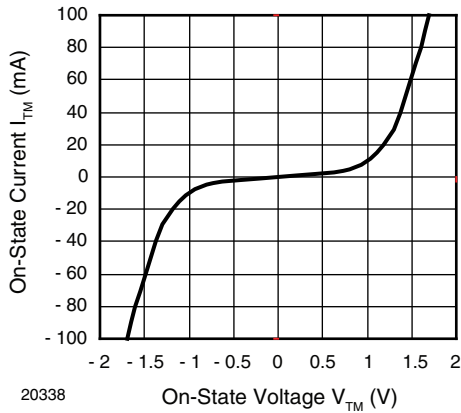


Fig. 3 - On-State Current vs. V_{TM}

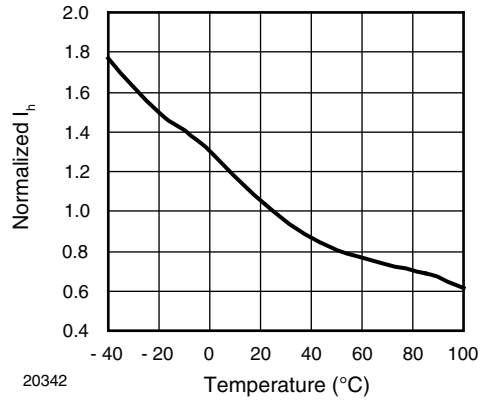


Fig. 6 - Normalized Holding Current vs. Temperature

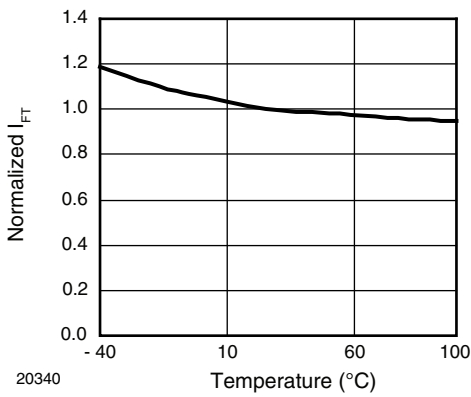


Fig. 4 - Normalized Trigger Current vs. Temperature

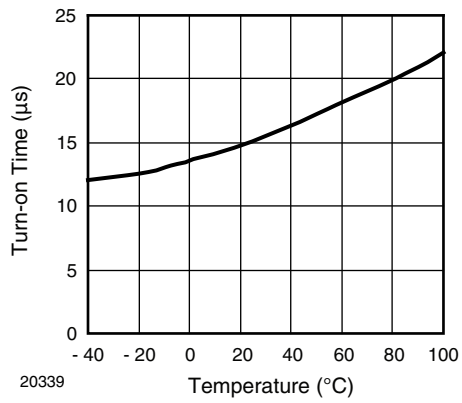


Fig. 7 - Turn-on Time vs. Temperature

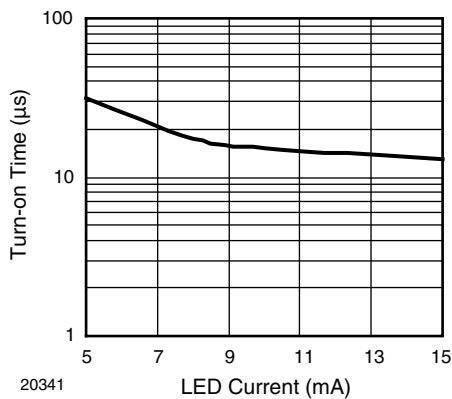


Fig. 5 - Turn-on Time vs. LED Current

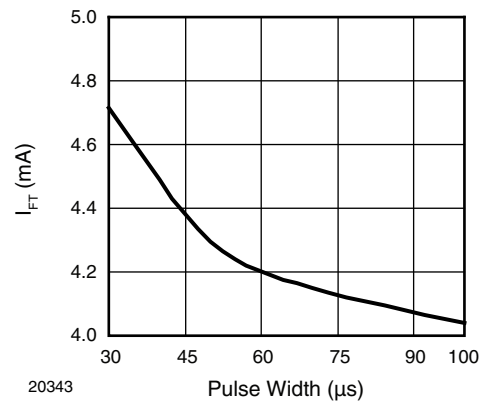
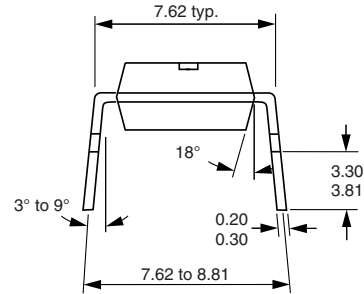
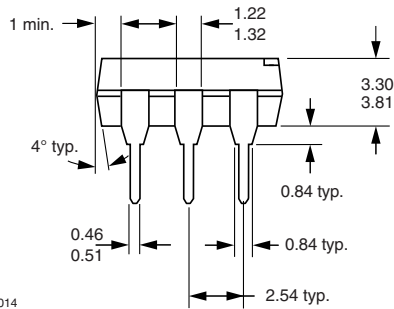
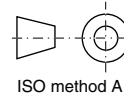
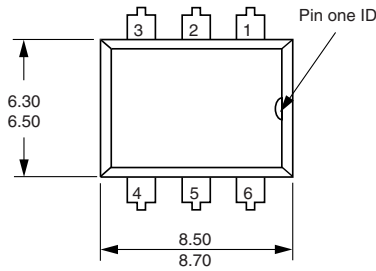


Fig. 8 - Trigger Current vs. Pulse Width

PACKAGE DIMENSIONS in millimeters

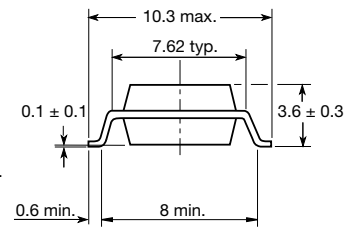
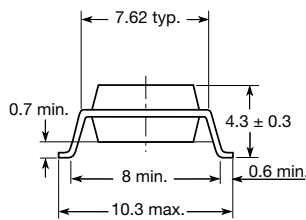
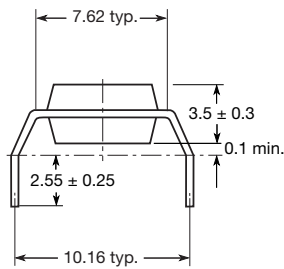


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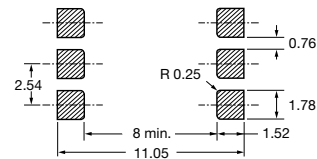
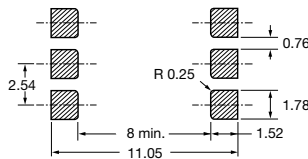
Option 6

Option 7

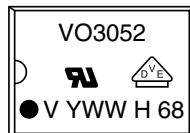
Option 9



20802-24



PACKAGE MARKING



Notes

- The VDE logo is only marked on option1 parts.
- Tape and reel suffix (T) is not part of the package marking.



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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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