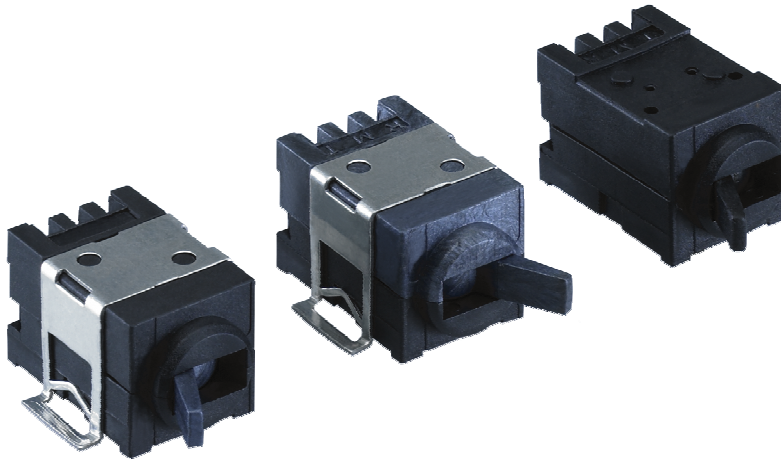


441 KIPPSCHALTER

TOGGLE SWITCH



441


SPDT
 Single
 Pole,
 Double
 Throw

ROHS
 COMPLAINT

 Umwelt-
 management
ISO 14001
DEKRA
 zertifiziert

 Qualitäts-
 management
ISO 9001
DEKRA
 zertifiziert

441

AUSFÜHRUNG

- + 1-poliger Kipphebelschalter
- + beständig gegen elektrostatische Aufladungen bis 8kV
- + Kundenspezifische Betätigungsvarianten möglich
- + Dichtigkeit IP67

ANSCHLÜSSE

SMD- oder THT- Ausführung

ABMESSUNGEN

22,1 x 10,2 x 10,2 mm

CONSTRUCTION

- + *Single-pole toggle switch*
- + *Protected against electrostatic discharge up to 8kV*
- + *Customised operating methods possible*
- + *Sealing IP67*

PINING

SMD or THT design

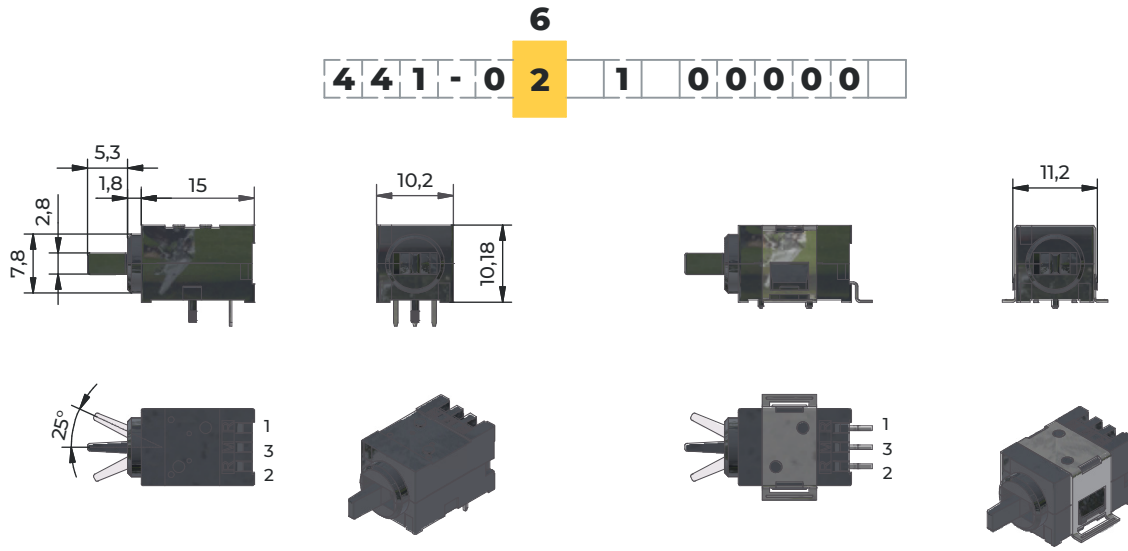
DIMENSIONS

22.1 x 10.2 x 10.2 mm

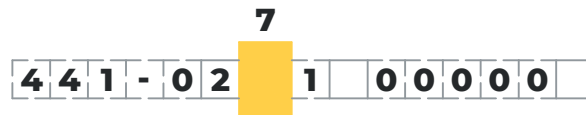
AUSFÜHRUNG CONSTRUCTION	Schaltweise Anschlußmaße Abmessungen	Breake before make (bbm) See drawing See drawing	<i>Function</i> <i>Pitch</i> <i>Outline Dimensions</i>
ISOLIERWERKSTOFFE INSULATION MATERIAL	Gehäuse Kontaktträger Betätiger	Thermoplastic-UL-94-V0 Thermoplastic-UL-94-V0 Thermoplastic-UL-94-V0	<i>Housing</i> <i>Contact Body</i> <i>Actuator</i>
KONTAKTWERKSTOFFE CONTACT MATERIAL	Festkontakte Schaltkontakte Lötanschlüsse	CuBe Sn gal. Ni1 Au1 CuBe Be gal. Ni0.5 Au1 CuBe Sn gal. Sn 4 - 8 µm	<i>Fixed Contacts</i> <i>Sliding Contacts</i> <i>Pins</i>
ELEKTRISCHE DATEN ELECTRICAL DATA	Schaltspannung Schaltstrom Übergangswiderstand Isolierwiderstand	Max. 60 V Max. 0.5 A < 50 mOhm > 100 GOhm	<i>Switching Voltage</i> <i>Switching Current</i> <i>Contact Resistance</i> <i>Insulation Resistance</i>
MECHANISCHE DATEN MECHANICAL DATA	Lebensdauer Betriebstemperatur Lagertemperatur Betätigungskraft	> 20 000 operations -10 °C to +90 °C +15 to +40°C / rH: 30-70% > 4 N	<i>Life Expectancy</i> <i>Operating Temperature</i> <i>Storage Temperature</i> <i>Operating Force</i>
LÖTBEDINGUNGEN/ART SOLDERING TIME / CONDITIONS	THT Lötverfahren Lötbedingungen Max. Temp. Lötseite Max. Temp. Bauteilseite Waschen	single wave acc. DIN EN 61760-1 260 °C / 4 s 80 °C not allowed	THT <i>Soldering process</i> <i>Soldering conditions</i> <i>Max. temp. soldering side</i> <i>Max. temp. component side</i> <i>Washing</i>
	SMD Lötverfahren Lötbedingungen Max. Temp. Bauteilseite Waschen	reflow soldering / infrared acc. to IPC/JEDEC J-STD-020D Tab. 4-2 (max. peak temperature +260°) 260 °C / 5 s not allowed	SMD <i>Soldering process</i> <i>Soldering conditions</i> <i>Max. temp. component side</i> <i>Washing</i>



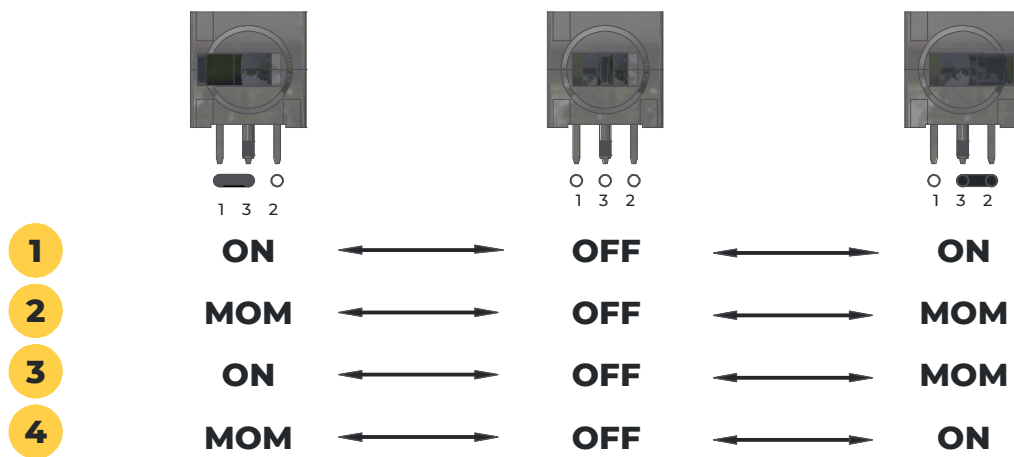
Pos. 6 SCHALTERAUSFÜHRUNG | SWITCH VERSION



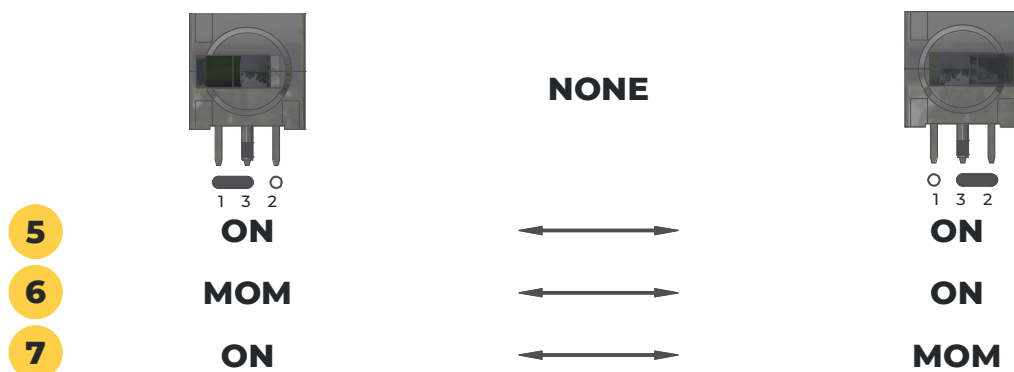
Pos. 7 SCHALTFUNKTION | SWITCH FUNCTION



Mittelstellung ohne Kontaktgabe | Middle position without contact



ohne Mittelstellung | without Middle position



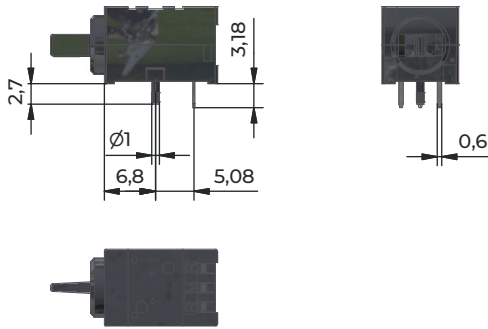
MOM = TASTFUNKTION | MOMENTARY POSITION
 ON or OFF = RASTFUNKTION | STABLE POSITION
 NONE = OHNE MITTELSTELLUNG | WITHOUT MIDDLE POSITION

Pos. 9 ANSCHLUßART | TERMINAL DESIGN

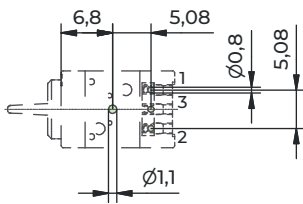
9

4 4 1 - 0 2 1 0 0 0 0 0

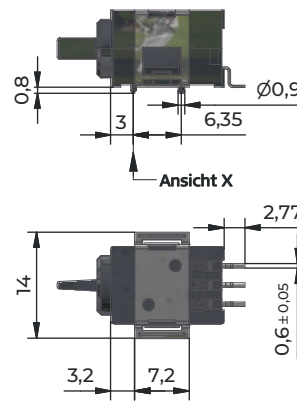
1 THT
THT



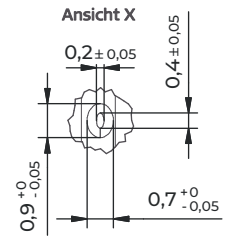
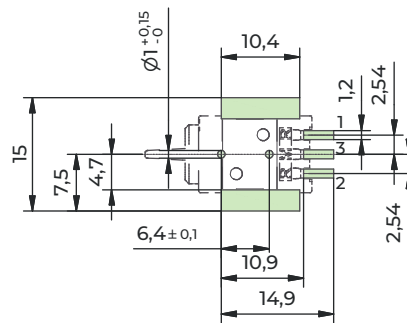
Leiterplattenlochbild Bauteileseite
drilling matrix component side



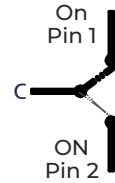
2 SMD Gull-wing
SMD Gull-wing



Löt-Pad-Anordnung
SMD soldering pad



Schalt diagramm
circuit diagram

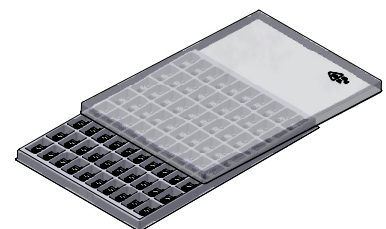
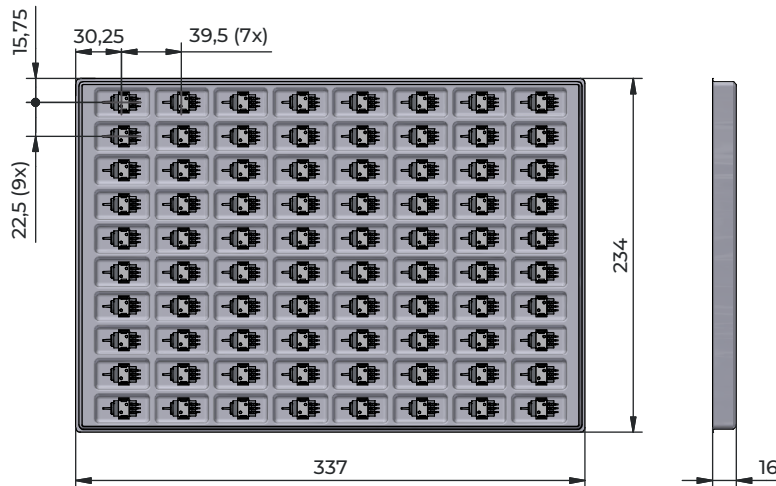


Pos. 15 VERPACKUNG | PACKAGING

15

4 4 1 - 0 2 1 0 0 0 0 0

1 Palette
palette



Daten der Palette
properties of the palette

max. Stückzahl number of pieces	Werkstoffe Materials
80	Palette palette PS
	Deckel cover PVC

WERKSTOFFE
MATERIALS

Blistergurt
Abdeckband

PS
PET

Embossed tape
Reel

Zugkraft

min. 10 N

Embossed tape pull strength

ABDECKBAND
TOP COVER TAPE

Abzugswinkel
Abzugsgeschwindigkeit
Abzugskraft

165° - 180°
300 mm / min.
0.1 - 0.7 N

Peel - off angle
Peel - off speed
Peel - off force

441

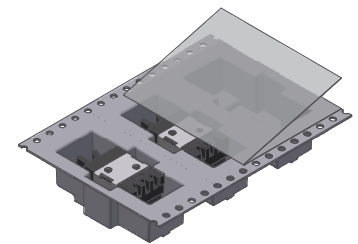
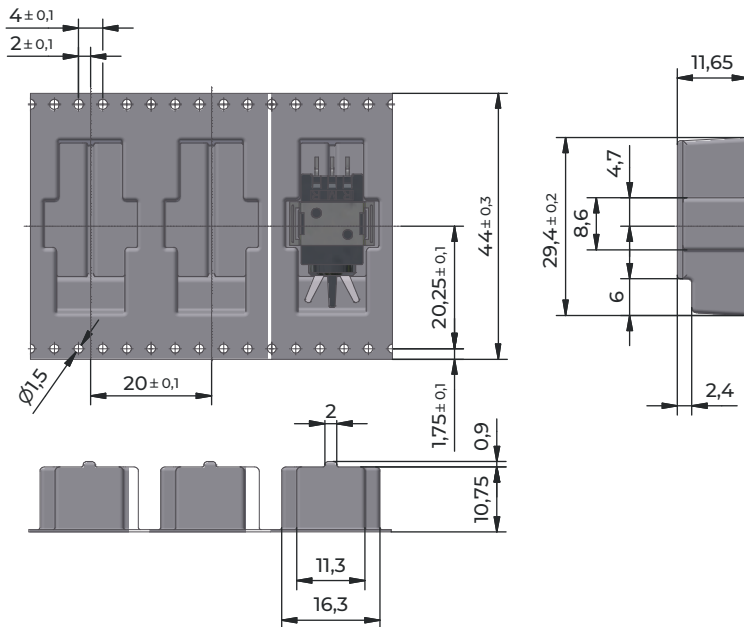
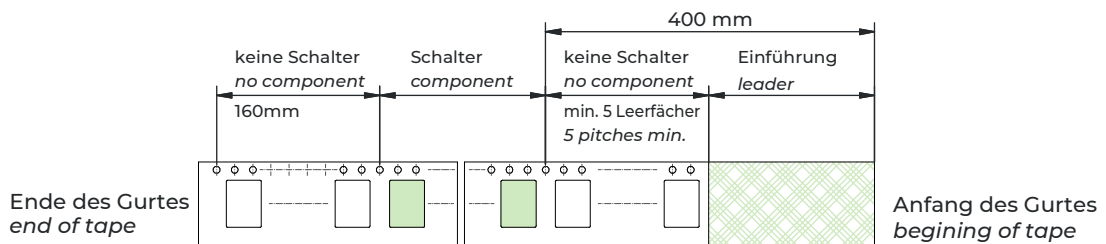
Pos. 15 VERPACKUNG | PACKAGING

15

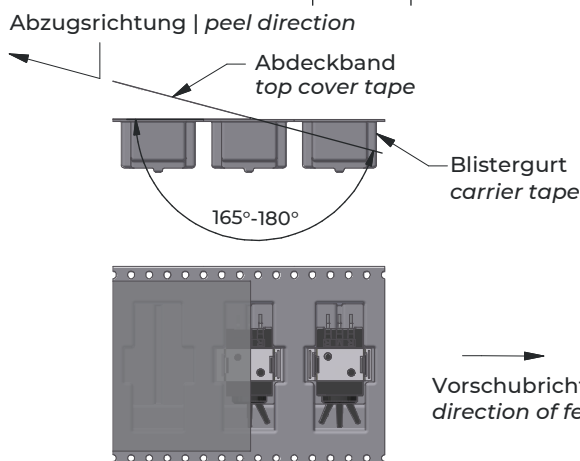
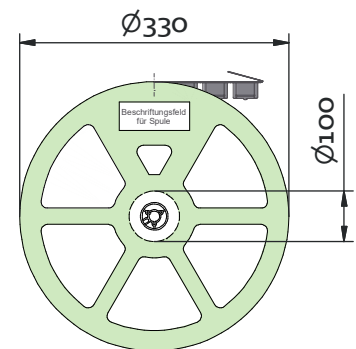
4 4 1 - 0 2 1 0 0 0 0 0

2

Gurt | embossed tape
Blistergurtabmessungen | embossed tape dimensions



Spulenabmessungen
reel dimensions



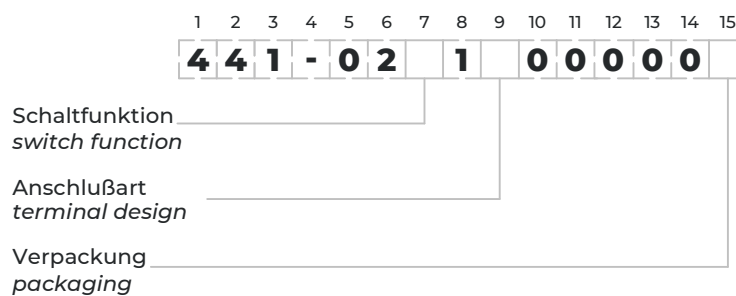
Schalter switch	max. Stückzahl number of pieces
SMD-Ausführung SMD version	300

Anschrift | Address

Firma: <i>Company:</i>	_____	Datum: <i>Date:</i>	_____
Adresse: <i>Address:</i>	_____	Tel.: <i>Phone:</i>	_____
Name: <i>Name:</i>	_____	Fax: <i>Fax:</i>	_____
Kundenr.: <i>Customer No.:</i>	_____	E-Mail: <i>E-Mail:</i>	_____



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