

Approvals:

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Revision record:

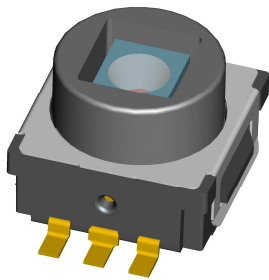
Revision	Date	Comments
-	April 30 th 2013	Creation (<i>according to ECR 9591</i>)
rev. A	February 13 ^h 2014	Update : (<i>According to ECR N° 10476</i>) <ul style="list-style-type: none">• K8WK41G LFS version added
rev. B	August 26 ^h 2014	Update : (<i>According to ECR N° 11028</i>) <ul style="list-style-type: none">• Operating life 300 Keycycles validated
rev. C	May 20 th 2015	Update : (<i>According to ECRO N° 9716</i>) <ul style="list-style-type: none">• For the blue colour of LED, designation “BU” instead of “BL”
rev. D	Mach 10 th 2016	Update : (<i>According to ECR N° 13165</i>) <ul style="list-style-type: none">• K8BB41G LFS version added

Summary:

1. Description / Main Features
2. Designation
3. Construction
4. Electrical data
5. Mechanical data
6. Physical data
7. Operating environment
8. Additional data : storage and handling environment
9. Additional data : process environment
10. Applicable norms
11. Options

Note: This specification, attached documents and attached drawings cannot be communicated to anybody without written agreement of C&K.

1 - Description

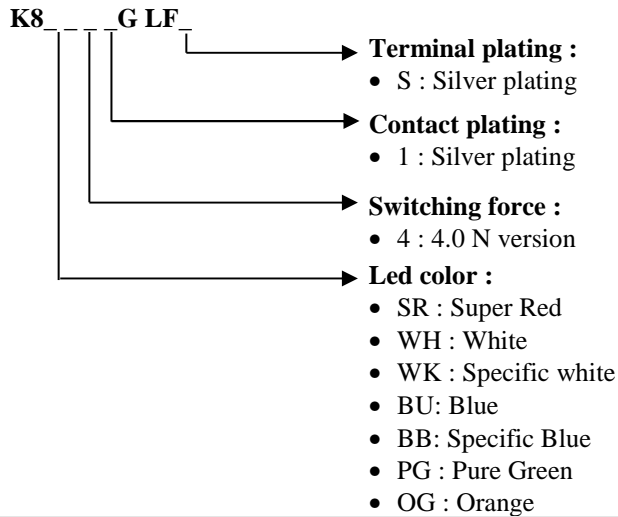


The K8 is a back-lighted, miniature long travel switch with tactile feedback, designed to be compatible with the Surface Mount Technology process (SMT process).

Main Features

- Excellent tactile feedback
- Terminal plating : LFS (lead free silver)
- Reliable contacts
- Compatible with lead free reflow soldering processes of SMT devices
- Lead-Free ROHS compliance
- Compatible with pick & place machines

2 - Designation



3 - Construction

Function	Momentary action
Contact type	Normally Open
Terminals	SMT

4 - Electrical data

	Contact plating : Ag
Maximum power	1.0 VA
Min/max voltage	20 mVdc – 32 Vdc
Min/max current	1.0 mA – 50 mA
Dielectric strength	≥ 250 Vrms
Contact resistance	≤ 100 mΩ
Insulation resistance	Initial measurement : ≥ 1 GΩ After damp heat : ≥ 10 MΩ
Bounce time	≤ 10 ms

5 - Mechanical data

Switching force (Fa)	Fa = 4.0 N ± 25%
Tactile feeling (Δ%)	Δ ≥ 25%
Return force (Frr)	Frr ≥ 0.3 N
Electrical travel (Te)	Te = 0.45 mm ± 0.15
Mechanical travel (Tm)	Tm = 0.45 mm ± 0.15
Total travel (Tt)	Tt = 0.95 mm ± 0.15
Contact simultaneity	≤ 0.10 mm

6 - Physical data

Dimensions & layout	According to product drawing: <ul style="list-style-type: none"> • K8BB41G LFS: CU717411J4FP • All other versions: CU71M01010FP
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7 - Operating environment

Operating temperatures	- 40°C / + 85°C
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Relative humidity	90 to 96 % According to NF EN 60068-2-30
Climatic category	40/085/04
Operating life	300 000 cycles
Vibrations	10-500 Hz / 10 g / 3 axis No discontinuity > 1µs According to NF EN 60068-2-6
Mechanical shocks	½ sinusoidal / 50 g / 11 ms 3 shocks in each direction of the 3 axis No discontinuity > 1µs According to NF EN 60068-2-27
Overload	40 N - 1mn
8 - Additional data : storage and handling environment	
Packaging conditions	According to product drawing
Transport conditions	According to specification NF H00-060
Storage temperatures	-40°C / + 85°C
9 - Additional data : process environment	
Soldering process	According to lead free process (C&K procedure : PS-LF-001)
Washing process	No washing
Chemical agent	N.A.
IP Code	IP 40
Shear test (switch/PCB)	50 N min
10 - Applicable norms	
Testing procedure (C&K spec)	Proc-essai 16
Legal norm (EHS)	C&K procedure
11 - Options	
LED versions	According to the table below

LED versions							
Colour	White	Specific White	Blue	Pure Green	Orange	Super Red	Specific Blue
	Forward voltage if 20mA						Forward voltage if 10mA
Min	3 V	3 V	3 V	1.8 V	1.85 V	1.8 V	2.7 V
Max	4.1 V	4.1 V	4.1 V	2.4 V	2.35 V	2.3 V	3.4 V
Reference LED OSRAM	LWT67C- S2U1-5K8L	LWT67C- T2U2-6K7L	LBT67C- P2R1-35	LPT676- L1M2-25	LOT676- R1S2-24	LST676- Q1R2-1	LCBT67S-P2Q2- 5J6L