

Table 1. General Purpose Latch & Switch - Quick Selector

Parameters	Latch			Bipolar Switch			Unipolar Switch		
	US1881	US1882 ⁽⁴⁾	US3881	US2881 US2882	US2884	US4881	US5681 ⁽⁴⁾	US5781 US5782	US5881
Sensitivity ⁽¹⁾	High	Low	High	Very High	Very High	Very High	High	Medium	Low
B _{OP} max ⁽¹⁾ [mT]	9.5	30	9	6	6	6	7.2	15	30
B _{RP} min ⁽¹⁾ [mT]	-9.5	-30	-9	-6	-6	-6	2	3.5	9.5
B _{HYST} typical ⁽¹⁾ [mT]	10	40	10	5	4	5	2	5	4.3
Temperature range ⁽²⁾	E, K, L	L	E, K, L	E, L	L	E, K, L	E	E, L / L	E, L
V _{DD} range [V]	3.5~24	3.5~24	2.2~18	3.5~24	3.5~24	2.2~18	3.5~24	3.5~24	3.5~24
I _{DD} average [mA]	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Open Drain output	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
I _{OUT} continuous max [mA]	20	20	20	20	20	20	20	20	20
V _{DSON} max [V] @ I _{OUT}	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Package Pole Active ⁽³⁾	TO92 flat (UA)	S	S	S	-	S	-	S / -	S
	TSOT (SE)	N	N	N	S	N ⁽⁴⁾	S	N / S	N
	UTQFN (LD)	-	-	-	S	-	S	-	-
RoHS (Pb-free) Compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Green Compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

For more detailed information about the device performance, please refer to the latest datasheet revision available on our website or contact our sales force.

¹ 1 mT = 10 Gauss

² Temperature ranges: E (-40/85°C), K (-40/125°C), L (-40/150°C)

³ Pole Active: magnetic pole applied to the marked side of the package which turns the Output ON (Low)

⁴ Please contact Melexis for further information

Table 2. Low Power / Energy-Saving Latch & Switch - Quick Selector

Parameters	Latch	Omnipolar Switch	
	MLX92213	MLX90248 <i>New Generation</i>	MLX90248-H ⁽¹⁾
V _{DD} range	1.6~3.6V	1.5~3.6V	3.5~5.5V
I _{DD} average (typical)	48µA @3V 36µA @1.8V	5µA @3V 3µA @1.8V	25µA @5V
Sensitivity ⁽²⁾	Ultra-High	Very High	Very High
B _{RP} (min) / B _{OP} (max) ⁽²⁾ [mT]	-4 / 4	0.8 / 6	0.5 / 6
B _{HYST} (typical) ⁽²⁾ [mT]	4	1	1
Micropower cycling	Internal, External (via EN pin)	Internal	Internal
Output Refresh Period (typical)	1.3ms	40ms	25ms
Standby mode	Yes (via EN pin)	No	No
Output type	Push-Pull	Open Drain	Open Drain
Output Voltage Level max @ I _{OUT} = 1mA (Low level ; High level if push-pull output)	0.4V ; V _{DD} -0.4V	0.4V	0.4V
Operating Temperature range	-40 ~ 85degC	-40 ~ 85degC	-40 ~ 85degC
Pole Active for the Package ⁽³⁾	TSOT (SE)	-	N & S
	UTQFN (LD)	S	N & S
RoHS (Pb-free) & Green Compliant	Yes	Yes	Yes

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¹ Please contact Melexis for further information

² 1 mT = 10 Gauss

³ Active: magnetic pole applied to the marked side of the package which turns the Output ON (Low)

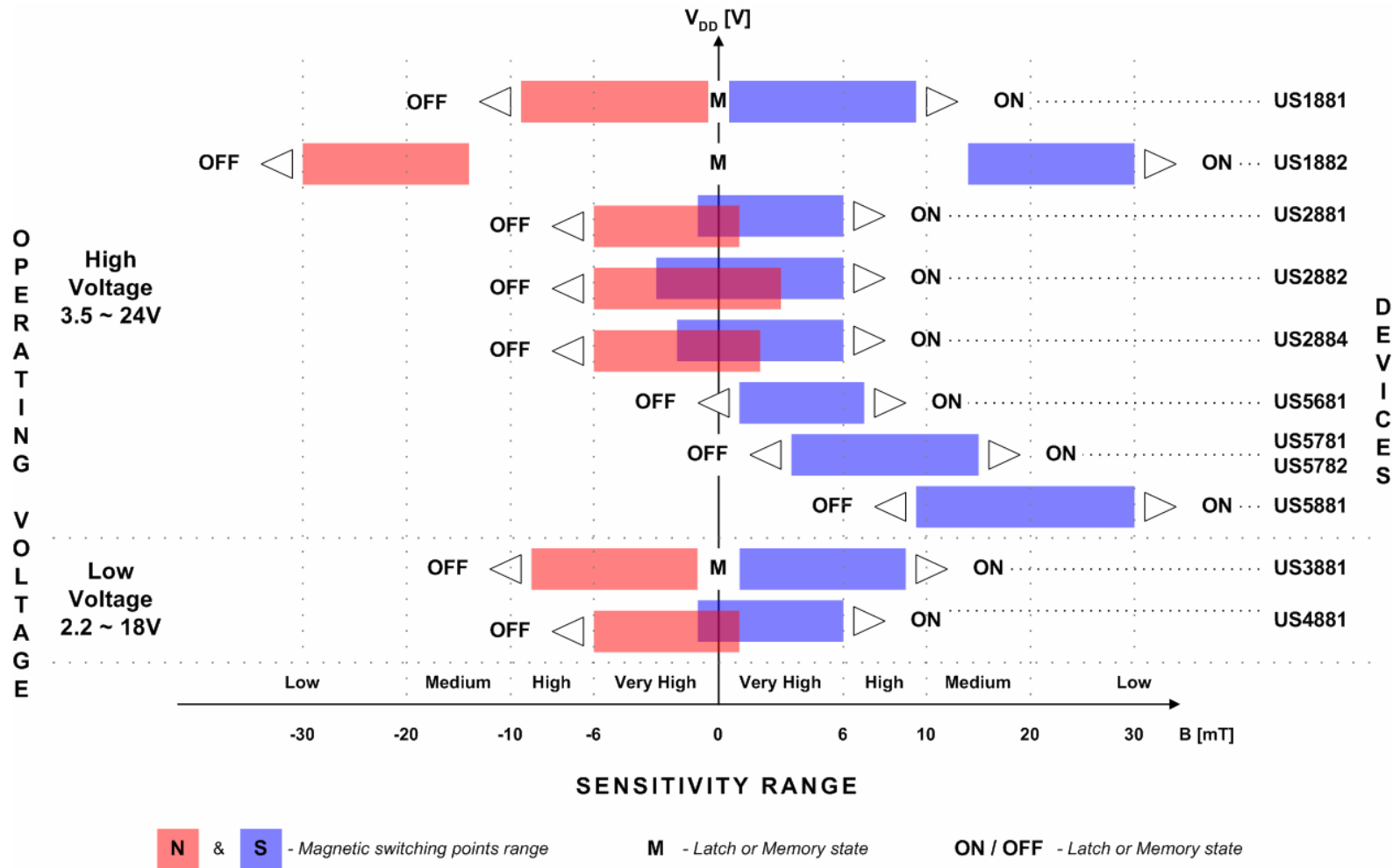


Figure 1. General Purpose Latch & Switch Graph Selector by Operating Voltage and Magnetic Sensitivity

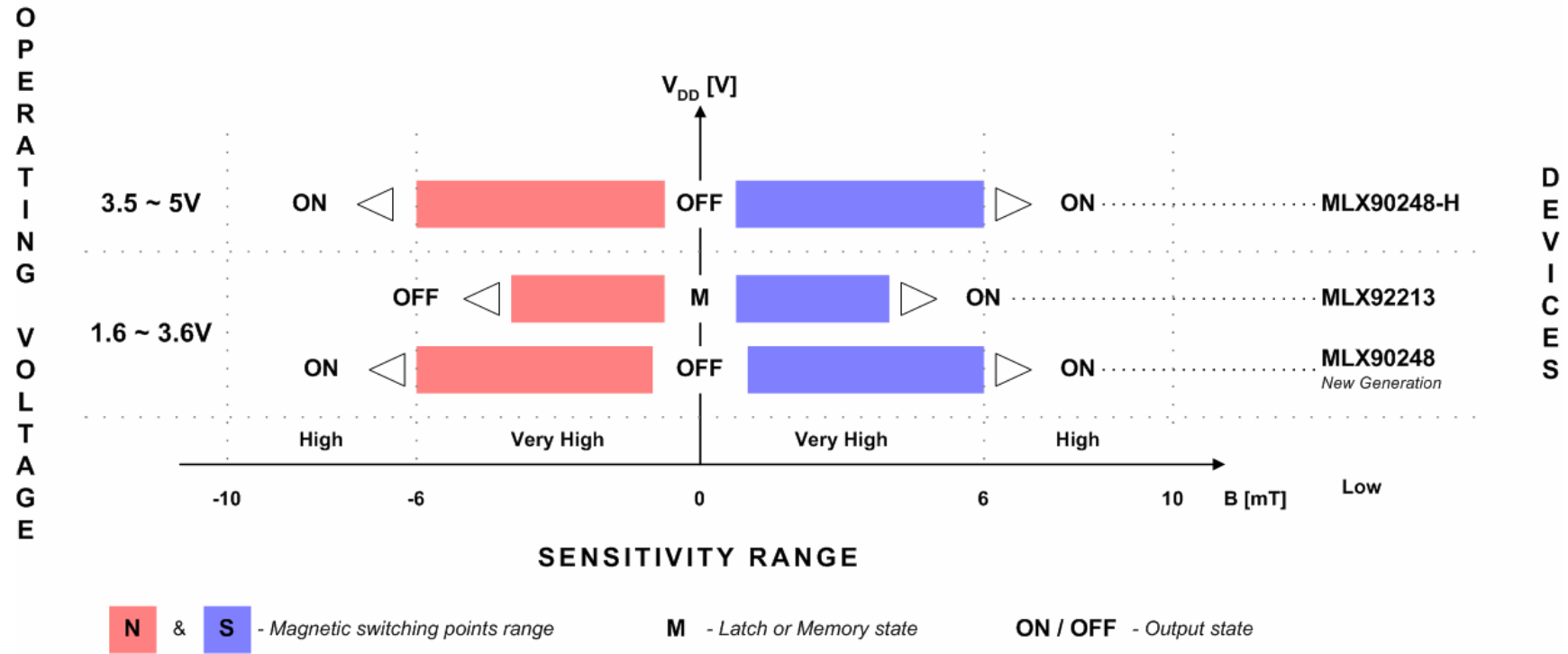


Figure 2. Low Power / Energy-Saving Latch & Switch Graph Selector by Operating Voltage and Magnetic Sensitivity

Table 3. Package pictures

Through-Hole Package	Surface Mount Package	Chip Size Package
 <p data-bbox="459 995 741 1031">TO92-3L flat (UA)</p>	 <p data-bbox="1003 999 1227 1034">TSOT-3L (SE)</p>	 <p data-bbox="1509 995 1756 1031">UTQFN-6L (LD)</p>

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