

ORDERING INFORMATION

Part Number	VOUT Voltage	Package Code	Package	Shipping
ST809-XXXS-TRG	2.63 2.70 2.93 3.08	S	SOT-23	3000/Tape&Reel

Note:

※ SOT-23 : Only available in tape and reel packaging. (A reel contains 3000 devices)

※ G : Lead-free product. This product is RoHS compliant.

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Maximum	Unit
Supply Voltage	V _{CC}	6.0	V
Output Voltage	/RESET	-0.3 to (V _{CC} +0.3)	V
Input Current	I _{IN}	20	mA
Output Current	I _{OUT}	20	mA
Power Dissipation	P _D	320	mW
Thermal resistance junction to ambient SOT-23	θ _{JA}	230	°C/W
Operating junction temperature range	T _J	0 to 125	°C
Storage temperature range	T _{STG}	-65 to 150	°C
Lead temperature (soldering) 10sec	T _{LEAD}	300	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

POWER DISSIPATION TABLE

Package	θ _{JA} (°C/W)	D _f (mW/°C) T _A ≥ 25°C	T _A ≤ 25°C Power rating(mW)	T _A = 70°C Power rating(mW)	T _A = 85°C Power rating (mW)
S	230	3.5	543	348	283

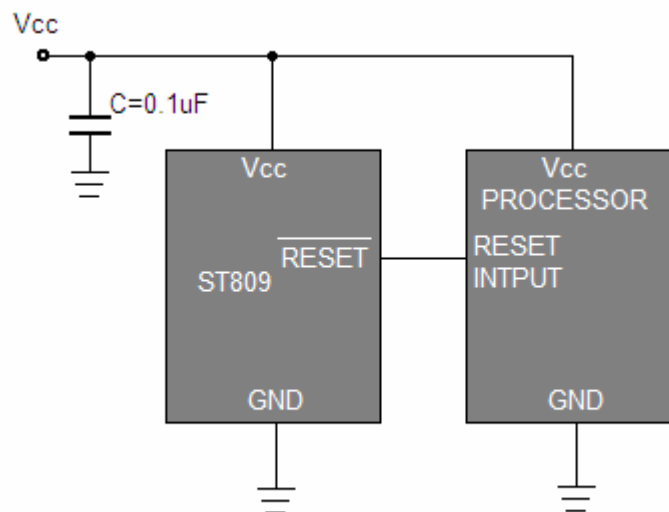
Note: θ_{JA}: Thermal Resistance-Junction to Ambient, DF: Derating factor, PO: Power consumption

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ Unless otherwise noted specified.)

V_{CC} = full range, $T_A = -40^\circ\text{C}$ to $+105^\circ\text{C}$, unless otherwise noted. Typical values are at $T_A = +25^\circ\text{C}$, $V_{CC} = 3.3\text{V}$ for 2.93/3.08V versions, and $V_{CC} = 3\text{V}$ for 2.7V/2.63V version.

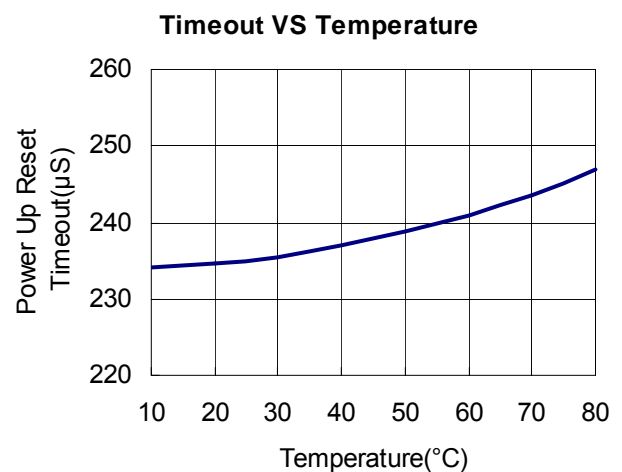
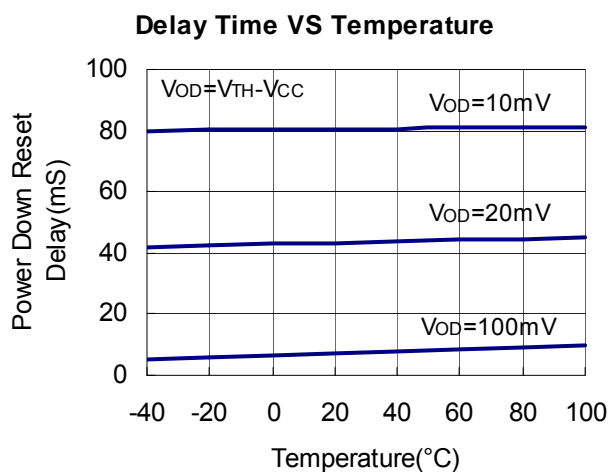
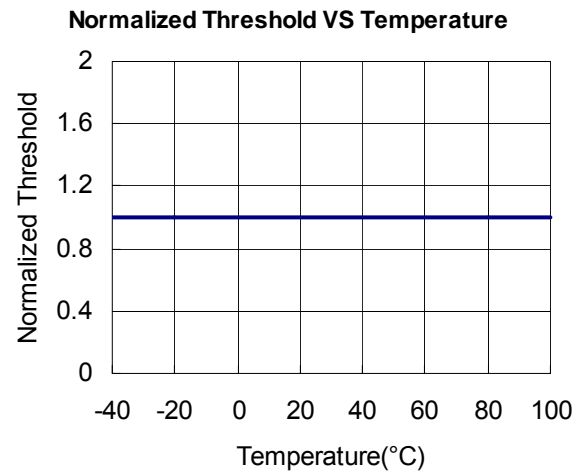
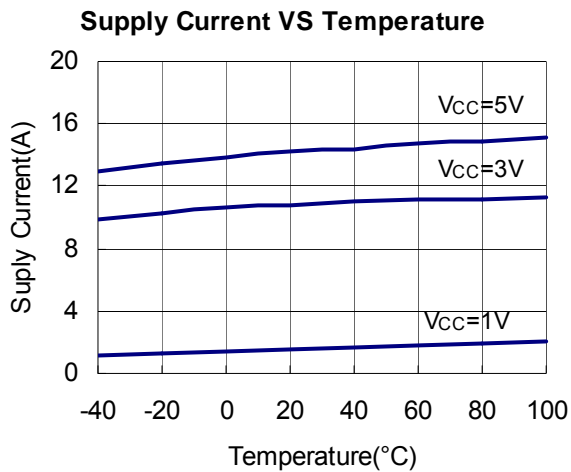
Parameter	Symbol	Test Conditions	Operating Conditions			Unit
			Min	Typ	Max	
Input Voltage	V_{CC}	-	2.0	-	5.5	V
Supply Current	I_{CC}	-	-	18	25	mA
Reset Threshold	V_{TH}	ST809-2.63 ST809-2.70 ST809-2.93 ST809-3.08	2.55 2.66 2.86 3.00	2.63 2.70 2.93 3.08	2.68 2.73 2.99 3.15	V
Reset Threshold Temperature Coefficient	-	-	-	30	-	ppm/ $^\circ\text{C}$
V_{CC} to Reset Delay $V_{CC}=V_{TH}$ to ($V_{TH} - 100\text{mV}$)	-	-	-	20	-	μsec
Reset Active Timeout Period	-	-	140	240	560	msec
/RESET Output Voltage Low	V_{OL}	$I_{SINK}=1.2\text{mA}$	-	-	0.3	V
/RESET Output Voltage High	V_{OH}	$I_{SOURCE} = 500\mu\text{A}$	$0.8V_{CC}$	-	-	V

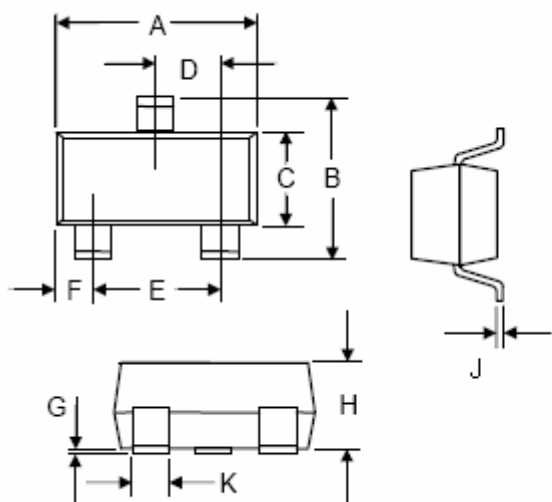
NOTE : RESET threshold temperature coefficient is the worst case voltage change divided by the total temperature range.

TYPICAL APPLICATIONS


Typical Application Diagram

■ TYPICAL PERFORMANCE CHARACTERISTICS



■ SOT-23 PACKAGE DIMENSIONS


Symbol	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
A	0.110	0.120	2.80	3.04
B	0.83	0.098	2.10	2.64
C	0.47	0.055	1.20	1.40
D	0.35	0.041	0.89	1.03
E	0.70	0.081	1.78	2.05
F	0.18	0.024	0.45	0.60
G	0.001	0.0039	0.013	0.100
H	0.035	0.044	0.89	1.12
J	0.003	0.007	0.085	0.18
K	0.015	0.02	0.37	0.51