

Table 4-2. MPC823 (UDR & CDR) Power Consumption

| OPERATION MODE                          | F98S<br>UDR2 (.42 $\mu$ )<br>EQUATION                               | POWER @<br>50MHZ<br>F98S<br>UDR2 (.42 $\mu$ ) | H89G<br>CDR2 (.36 $\mu$ )<br>EQUATION                                | POWER @<br>25MHZ<br>H89G<br>CDR2 (.36 $\mu$ ) | POWER @<br>50MHZ<br>H89G<br>CDR2 (.36 $\mu$ ) | POWER @<br>66MHZ<br>H89G<br>CDR2 (.36 $\mu$ ) |
|---|---|---|--|---|---|---|
| <b>Normal High</b><br>LPM=00<br>TEXPS=1 | $\approx 20 \text{ mW} + F_s/50 * (.78)/2^{D_{FNH}} \text{ W}$      | 800 mW  | $\approx 20 \text{ mW} + F_s/50 * (.555)/2^{D_{FNH}} \text{ W}$      | 298 mW  | 575 mW  | 752 mW  |
| <b>Normal Low</b><br>LPM=00<br>TEXPS=1  | $\approx 20 \text{ mW} + F_s/50 * (.78)/2^{D_{FNH}+1} \text{ W}$    | 410 mW  | $\approx 20 \text{ mW} + F_s/50 * (.555)/2^{D_{FNH}+1} \text{ W}$    | 159 mW  | 298 mW  | 385 mW  |
| <b>Doze High</b><br>LPM=01<br>TEXPS=1   | $\approx 20 \text{ mW} + F_s/50 * 0.4(.78)/2^{D_{FNH}} \text{ W}$   | 332 mW  | $\approx 20 \text{ mW} + F_s/50 * 0.4(.555)/2^{D_{FNH}} \text{ W}$   | 131 mW  | 242 mW  | 312 mW  |
| <b>Doze Low</b><br>LPM=01<br>TEXPS=1    | $\approx 20 \text{ mW} + F_s/50 * 0.4(.78)/2^{D_{FNH}+1} \text{ W}$ | 176 mW  | $\approx 20 \text{ mW} + F_s/50 * 0.4(.555)/2^{D_{FNH}+1} \text{ W}$ | 76 mW   | 131 mW  | 166 mW  |
| <b>Sleep</b> LPM=10<br>TEXPS=1          | -   | 10 mW   | -  | 10 mW   | 10 mW   | 10 mW   |
| <b>Deep-Sleep</b><br>LPM=11<br>TEXPS=1  | -   | 40 $\mu$ A                                    | -  | 40 $\mu$ A                                    | 40 $\mu$ A                                    | 40 $\mu$ A                                    |
| <b>Power-Down</b><br>LPM=11<br>TEXPS=0  | -   | 10 $\mu$ A                                    | -  | 10 $\mu$ A                                    | 10 $\mu$ A                                    | 10 $\mu$ A                                    |

NOTE: F<sub>s</sub> IS THE SYSTEM FREQUENCY IN MHZ

ARCHIVED BY FREESCALE SEMICONDUCTOR, INC.